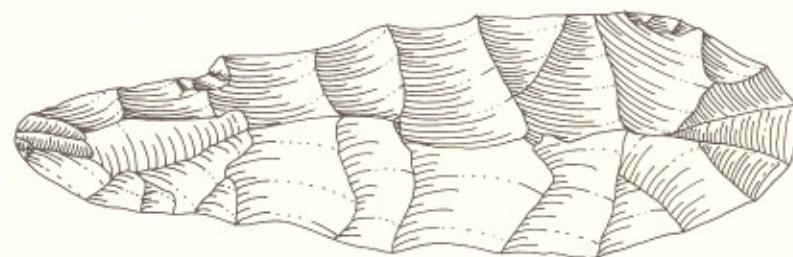


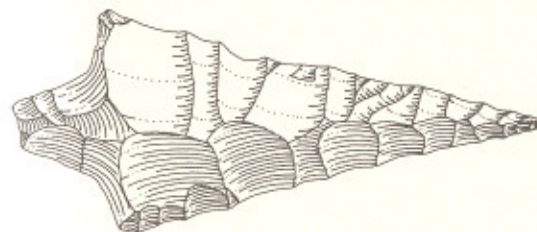
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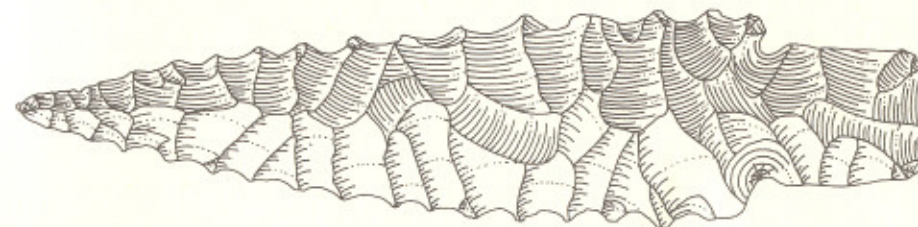


The Archaeology of California

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institutions are still in existence but have not been the subjects of archaeological study.

Besides the rise of complex mechanisms to organize and control the people living within communities, Pacific times also saw the rise of mechanisms that controlled the relationship between communities. Kinship, trade, and religion provided some of these ties, but during the Late and Final Pacific there arose a new form of political organization that united communities into a more complex form, the tribelet.

Some writers have likened this organization to that of a true chiefdom, ruled by a powerful, authoritarian leader (e.g., T. King 1971), but most anthropologists do not believe that California tribelets were that centralized or were ruled by authoritarian leaders who could compel their subjects to obey their decisions. The leader of the tribelet did seem to control more resources and power than the headman of any other settlement in the tribelet, a fact that was reflected in Pacific burial practices.

The members of a family in one settlement within a tribelet might have kin in several other communities. In this way, kinship ties cross-cut community organization and helped to hold the tribelet together. The value of the tribelet to Pacific Period society lay in just this ability to tie together into cooperative organizations, with political, religious, social, and economic links, communities that otherwise might be rivals. Through cooperation, communities were better able to fulfill their needs in the Pacific strategy.

Just how much more complex and sophisticated Native Californian cultures might have become and what directions they might have taken will never be known. With the arrival of the Europeans came an end to the autonomous Native Californian way of life. Starting with occasional contacts by land and sea in 1539-40, and then with permanent settlement in 1769, the foreigners brought with them new technology, new diseases, new religions, new economies, and the physical destruction of the old order. These changes are traced in the following chapter on the Historical Period.

CHAPTER FIVE

The Historical Period

Because of the great cultural variety in California during the Historical Period, no single scenario can express much of it. We have therefore chosen three brief vignettes, each showing a distinct way of life and each illustrating some dimension of Indian-White relationship in California at that time. Even so, a great many aspects of the Historical Period are still neglected.

1

A typical Spanish settlement might be located along the coast of southern California at the head of a shallow bay. There is no wharf; the occasional ship that visits the community anchors in the bay, and its crew reaches shore by row-boat. Several small boats and skiffs are pulled up onto the sand near a shed. The shed holds cattle hides, tanned, tied into bales, and waiting for shipment to Mexico and Spain. The shed is near one end of a tiny pueblo, which consists of a few dozen adobe structures. During the heat of the day a few dogs and pigs can be seen, resting in the shade of trees or buildings, while chickens scratch for seeds and insects between the houses and under the bushes. In some doorways, or on verandas and beneath ramadas, a few townspeople of Spanish or Mexican origin rest and visit. The few mercantile establishments are closed during the traditional mid-day siesta. The houses and stores straggle along the ill-defined, dusty streets leading up from the shore toward a larger, more imposing building at the opposite end of the community. The Spanish flag flying before this structure identifies it as the headquarters of the alcalde, the pueblo's civil administrator.

At the edge of town, not far from the alcalde's building, stands the presidio. This military garrison for the pueblo displays some of the precision of design lacking in the town. Its adobe buildings form a large square. Their windowless exterior walls are pierced only by a large gate that faces the sea and by a single sally port on the opposite side. The buildings open onto the central parade ground. Broad verandas shade the building fronts around the entire square. The commander's headquarters and chapel face the gate. Flanking these two buildings are officers' quarters and offices. Barracks, stores, and stables line the other sides. At midday a modest guard keeps watch while the company of fewer than a hundred soldiers rests from its regular duties of protecting the pueblo and the nearby mission.

Outside the town, on top of a low hill that overlooks the harbor and town, rises the adobe mission. Its half-completed sanctuary and belltower dominate the rectangular compound that houses the priests, offices, storerooms, and classrooms. Adjacent are the barracks where 2,000 Indian neophyte converts are held. Unmarried men are kept in separate barracks from unmarried women. Families are provided tiny apartments in another building. Indians provide virtually all the labor force for the mission's construction. After the siesta, Indian men will resume making adobe bricks under the direction of priest supervisors and some of the troops from the presidio. The women and older girls are learning to weave the coarse cloth that will be made into pants, shirts, and dresses for the neophytes. Tomorrow the troops will lead an Indian work force out into the fields, which need hoeing and irrigating. The crops are raised to feed the mission's population, since missions have to be self-sufficient. The padres will exempt the pregnant women from such work in an effort to get the neophyte population to replace itself. So far, the number of children raised has been far too few to sustain the neophytes' numbers.

The Indians themselves are often silent and demoralized. Many have lost contact with their families, or have seen members of their families die. The death rate at the mission is appallingly high and already the cemetery nearby is crowded. Many Indians find they cannot communicate with each other, since their languages differ; others have come from groups mutually hostile to each other. The mission padres are teaching the Indians Christianity, various industries and crafts, and the Spanish language. They encourage the Indians to marry in the church and to raise families in the separate huts and special barracks provided for this purpose. Some do marry, but few children are born, and many of the babies die soon after birth.

Sometimes Indians succeed in running away from the mission, but they are pursued by the troops and are usually recaptured and brought back. Recaptured runaways are usually beaten or put in stocks to discourage them from a second attempt. Because the Indian population at the mission keeps falling, the troops must regularly raid distant villages to bring in replacements.

A typical rancho of the Mexican period is situated in a coastal valley. Oaks dot the valley floor, shading a small winding creek. Chaparral blankets most of the hillsides. Sheep and cattle graze on the grass and leafy brush of the valley floor and the slopes. In the valley's center is a hacienda, an adobe house shaded by oaks, that serves as headquarters for this land-grant rancho. A Mexican officer holds the grant of eleven leagues of land—payment from the government for his services in the frontier military force. He has retired from the army to become a rancher, to raise cattle, horses, and sheep, and the crops needed to feed his stock and workers. He maintains a large house in town, where his wife and daughters prefer to stay, but he brings them for part of each year to the ranch so he can supervise his staff, and has built a residence in his headquarters compound for his family.

On his land had been a large Indian village occupied by several hundred people. Not long after the rancher arrived on this land, however, a smallpox epidemic swept through the village, killing all but a dozen or so people in the space of a few weeks. The survivors left abruptly to take refuge with relatives in more distant villages. The village now stands empty, its houses collapsed, and shrubs and grass are beginning to reclaim it. Indians who had once worked at the missions have drifted into the area looking for work. It was these Indians who have built most of the ranch buildings: the adobe ranch house with its low shed roof and sweeping veranda, the barracks for the vaqueros, the barns, the storerooms, and the kitchen house.

Now the rancher can sit in the shade of his veranda and look out upon his stables and gardens, where virtually his every material need is produced. Ships from Mexico arrive infrequently, but the more aggressive Yankee and English traders call at least once or twice a year, bringing the few manufactured goods he needs, such as iron tools and guns, and the luxury goods longed for by his family—fine cloth, Parisian hats, porcelain dishes, gold jewelry, and books. But where home crafts will suffice, the rancher has his Mexican and Indian ranch hands and domestic staff produce workable substitutes for the imports.

The Indians working on the ranch perform most of the heavy labor. The rancher in turn protects them from marauders, feeds them, provides medicine for the ill, and sees to it that the young people receive some training in crafts. The rancher's wife directs a small staff of Indian household servants. One Indian girl takes lessons with the rancher's daughters in reading and writing. The rancher arranges to have a priest visit the ranch at least once every two months to say mass, hear confession, and conduct any marriages and baptisms that might be required.

This ranchero is reckoned by his fellow Californians to be a wealthy, successful man. He can boast of prime land for many varas, many head of livestock, a fast horse, eleven sons and daughters, a fine home in the town and

another on his ranch, and great respect in the community. He takes his turn throwing lavish parties for the several dozen other Hispanic families of the region, the people of a distant pueblo, and the officers of the garrison. If his life is rude by European standards, it is nonetheless rewarding, and he reckons himself among the favored of God.

3

It is the 1870's, and a small group of Indians has managed to survive in the foothills of the Sierra. Their home is a cave, almost entirely concealed from the outside by heavy brush. Behind the brush, the cave's sandy floor extends for several hundred square feet, providing space for a group of a dozen Indians who sit about two small fires. They are the survivors of a village that once numbered more than a hundred people. Starvation, murder, and disease crippled the village, and, when some of the men stole cattle from a nearby ranch, the rancher and his hands tracked the stolen cattle to the village and killed almost everyone they found there. The survivors fled to this mountain cave to hide from further reprisals.

Most of the survivors belong to a single family, which was returning to the village from the hills when the massacre took place. They cannot catch salmon because they have been driven from their old fishing grounds along the river. Their last stores of seeds and acorns, gathered for the winter, were lost when the rancher burned their village. It is now late fall, and there are few seeds, acorns, or pine nuts left to be gathered at this time of year. Some deer can still be found, but the need for secrecy makes hunting difficult. The people fear that the ranchers may yet track them to this cave, and the greatest care must be taken to prevent discovery. Even providing for such basic needs as water and firewood has become a problem for the group, for if the same route is used frequently, a path may be worn from the creek to the cave, which might betray their presence.

When the village was burned, all the tools and equipment needed to carry on the activities of living were lost with it. The men must replace their stone tools and make new knives and milling tools for the women. The women must make new baskets at a time of year when few basketry materials are available. More is needed than can be quickly made.

The group is surviving on a day-to-day basis. People know nothing of what may happen to them or of what may have happened to the other Indian communities that lived near them on the river. Almost every aspect of their lives has been destroyed. The village shaman is dead, so there is no one who knows how to conduct all the rituals necessary for the proper conduct of their lives. The woman who knew more than anyone else about herbal medicines and healing magic was killed in the massacre, so there is no one to heal the sick properly. The best hunters in the community were killed. The group has no stored food, trade, or access to its accustomed hunting and gathering lands, so mem-

bers must spend every day in an unceasing hunt for food. Even if they are successful, people wonder what future is possible for them. There is a boy in the group who is almost old enough to marry, but there are no unmarried girls. Unless they can make contact with another group, the boy will remain unmarried and the people will see no future generations. White settlers continue to move into the countryside, and the people wonder when the newcomers will begin to move into the area near the cave. These grim thoughts are on the people's minds as they join together for their evening meal.

Native Californians had occupied California for more than 14,000 years, settling in every region, learning about its environments, and developing ever more effective ways of life. Within the last several centuries they were unusually successful for people who made their living exclusively through hunting and gathering.

Then a new sort of settler arrived, and the resulting clash of cultures brought most Native Californian societies to collapse. The cultures that managed to survive were severely altered, and Native Californians were reduced to the status of marginal citizens in a land once under their dominion. We know much more about the actual events of this part of California's archaeological record because, besides being more recent in time, the intruders brought with them the written word. This chapter of California's past is therefore documented in a way no earlier chapter could have been. No longer part of prehistory, it is the Historical Period.

THEMES OF THE HISTORICAL PERIOD

The Historical Period is that part of the past that lies within the scope of the written historical record. The first known event in California's recorded history was a Spanish exploratory trip to the Colorado River in 1539. This date could be used to mark the start of the Historical Period, but to do so presents a problem. The time of first contact between Native Californians and Europeans varied from group to group by more than three hundred years. There is no single date marking the end of prehistory and the beginning of recorded history for the whole state. Furthermore, early contacts with Europeans, fairly sporadic and transitory in nature, had only limited effect on Indian cultures. Yet some boundary must be adopted. We chose the year 1769 to mark the end of the Pacific Period because that year saw the beginning of permanent European settlement in California, with ensuing large-scale disruption of the Native California cultures. So, although history technically began to be recorded in California some

230 years earlier, we have allowed this time span to overlap the two periods.

The closing date for the Historical Period is the present. The current definition of antiquities, using National Historic Preservation Council guidelines, requires things to be at least a hundred years old, but archaeologists find value in studying things as recent as the present. An example can be found at the University of Arizona, where archaeologists have been studying the formation of the present-day Tucson municipal dump. There it is possible to learn about contemporary society from the garbage it discards—an inquiry with important implications for prehistoric archaeology (Rathje 1979). Archaeologists working on historical sites have an advantage over those who study the prehistoric period, in that archaeology and history benefit each other reciprocally. Historical documentation increases tremendously the kinds of information available to archaeologists, while providing controls that allow them to evaluate methods and assumptions. At the same time, archaeology also expands our knowledge of many historical events and periods, providing a perspective not often preserved in the written record (Deetz 1977; South 1977).

Just as with the prehistoric periods, we can point to some key themes of the Historical Period as seen from an archaeological perspective: the breakdown of Pacific Period focal adaptations, which also involved the breakdown of Native Californian cultures as a whole; the reemergence of pioneer settlement, this time among the various groups entering California for the first time; and the subsequent rise of urbanism and evolution of a multiethnic society.

The Breakdown of Pacific Period Focal Adaptations

The settlement of California by Europeans eventually led to the collapse of traditional Native Californian cultures. In the process, California Indian populations declined by at least 95 percent between 1770 and 1900. Central to this collapse was the destruction of the highly integrated, focal economies that had evolved during the Pacific Period. Missionization played a major part in this destruction, although its most direct influence was confined to the coast. Disease also played a major role. Yet, if all else had been equal, Native Californian populations might have been able to rebound from these losses, or at least to have stabilized at something approaching Archaic levels. After all, even after the Gold Rush, a good deal of the state was not heavily colonized until the late nineteenth or early twentieth centuries.

But all else was not equal. The root of the collapse of Pacific Period societies lay in the breakdown of regional interactions and the loss of

access to regional resources that were vital to Pacific peoples. This phenomenon was progressive. It evolved throughout the various stages of European settlement until, during the period of Anglo-American settlement, it culminated in the appropriation of the state and its resources for extensive farming, ranching, mining, lumbering, commercial fishing, and rising urbanism. No provision was made in this progression for the California Indians, who could not even return to an Archaic way of life successfully because the habitats most important to the Archaic lifeway had been taken from them. The breakdown of focal economies was an inevitable consequence of European settlement, and the collapse of Indian populations followed as a further consequence. The survivors were forced to follow a more diffuse adaptation, one capable at best of supporting only a fraction of the Pacific Period population.

The Emergence of New Pioneer Settlements

The perspectives we used to view prehistoric cultures can also be used to view cultures of the Historical Period. California's earliest European settlers can be likened to the Paleo-Indians in the sense that both were pioneer settlers. The way of life created by the Spaniards and Mexicans in California revolved about a focal economy which, although it involved agriculture, produced only a fraction of the variety of crops grown in Spain or Mexico at the time. The staples of existence focused on a few primary crops: cattle, sheep, and cereal grains (principally wheat and maize). The Spaniards and Mexicans brought with them a previous way of life, but not in all its variety. This simplified version relied on those features that could be made to work in both their former home and their new one. It was a generalized way of life, in the same sense that the Paleo-Indian lifeway was generalized, and it did not immediately take advantage of California's unique and potentially valuable resources. As time went on, however, an accommodation was increasingly forged, in which Spanish and Mexican colonial cultures took on a distinctively California quality, an accommodation that incorporated certain aspects of Native Californian cultures. Like the Paleo-Indians earlier, they had begun to cease being pioneers.

The Rise of Urbanism and the Evolution of a Multiethnic Society

Urbanization is the development of cities or urban centers: highly structured settlements characterized by dense populations, formal administration, high degrees of labor specialization, and marked distinctions in wealth and status. Cities are linked to a support base of

food-producing, exurban or suburban, market-oriented farms and ranches. They are tied to higher-level governments and to a national economy.

California today, with 24 million inhabitants, is highly urbanized, but it began evolving toward urbanism in the mid-nineteenth century. At that time, its population was not much larger than it had been just prior to Spanish settlement a century earlier. In tracing the course of urbanism in California, we can see that it involved the reorganization of both settlement and society, and not just a simple growth in population.

The trend toward urbanism was fostered by economic and political factors. California's economic growth after 1850 was based on its production of agricultural and ranch products, timber, and mineral resources, stimulated by a tremendous influx of people because of the Gold Rush. Networks of cities and towns arose to serve the primary producers, to channel imported goods to them, and to export the state's products. The location of San Francisco at one of the hemisphere's best deep-water harbors also made California a gateway linking America with the nations around the Pacific Ocean. At the same time, California's takeover by the United States and its accession to statehood imposed a highly structured system of government on the state. The establishment of federal, state, county, and municipal offices of government further reflected the centralization of the state's population in urban communities. A result of this trend was the creation of a new type of settlement—one with a distinctive archaeological form—the urban center.

At the same time that urbanization was emerging in California, the state witnessed a separate (but sometimes interrelated) phenomenon: the development of a multiethnic society. One interesting characteristic of California's Historical Period has been the continued immigration of people from different ethnic backgrounds. As a result, California has become one of the ethnically most complex regions of the nation. Formerly dominant groups were succeeded periodically by others. Since 1850 the dominant Anglo-American population has been augmented by new influxes of other ethnic groups. The many groups have interacted to greater or lesser degrees, yet they have also tended to maintain their identities in spite of the predominant popular image of America as a melting pot. Many of these peoples are completely unstudied archaeologically, but the potential is there, and such studies could reveal a great deal about the processes of ethnic interaction and persistence.

STAGES OF THE HISTORICAL PERIOD

The Historical Period passed through several distinct stages. Because of the existence of a historical record, a structure is automatically imposed on the historical era, a structure that focuses on specific individuals and events. Since the same is not true for the prehistoric era, it is hard to treat both periods within the same framework. The term "tradition," used to describe cultural reconstructions based on the archaeological remains of prehistory, is not really appropriate for historical cultures, since the actual names and much of the content of such cultures are known. Recognizing this problem, we have tried to organize the Historical Period into divisions that are as comparable as possible to the units used for the prehistoric periods. Rather than describe a series of archaeological traditions, we have divided the period into a series of successive historical stages. Each stage reflects a discrete period of time, a particular kind of cultural development, and a different dominant ethnic group.

Historical-period archaeology is still a new field in California. It has not yet provided enough data to allow us to characterize these stages from a basically archaeological point of view. We therefore rely heavily on historical documents to determine and describe each of these stages. Nevertheless, archaeology has already contributed some interesting information about these periods, and we will draw upon these contributions as much as possible in our discussions. Our divisions, which emphasize changes in the nature of the interaction between Indian and European cultures and the progressive development of the immigrant cultures, are the Exploration Stage (1539–1769), the Hispanic Stage (1769–1822), the Mexican Stage (1822–46), and the Anglo-American Stage (1846 to the present).

The Exploration Stage (1539–1769)

For nearly 250 years, starting in 1539, California was briefly visited by Spanish, British, and Russian explorers, traders, and trappers. This contact came sometimes from the Southwest, where Spain maintained colonies, but mostly from naval expeditions sent to explore the Pacific coastline (see Map 44).

The date 1539 marks the first of these contacts, when a detachment of Coronado's expedition from northern Mexico reached the Colorado River. Although the expedition did not penetrate the state, these Spanish explorers were apparently the first non-Indians to even reach the area. We say "apparently" because Asians may have sailed across



Map 44. Routes of early Spanish exploration in California, showing dates of contact. Spanish awareness of California's existence began with its sighting by a detachment of Coronado's expedition in 1539. Most other contacts made during the subsequent 230 years took place along the coast, the result of deliberate exploration or unplanned landfalls made by international trading vessels. Prior to 1769, when San Diego was founded, such contacts were brief, and their impact on native cultures was modest and localized.

the Pacific and accidentally or deliberately reached the coast of California earlier. The evidence for this is ambiguous at best, and if any such visits took place they made no impact on native cultures (Hutchinson 1969: 46-52).

Then, during 1542-43, a Portuguese navigator named João Rodrigues Cabrilho (Cabrillo in Spanish), leading a Spanish expedition,

sailed along much of California's coast and became the first European to discover the bay at San Diego. Then, sailing north to the Los Angeles area, he called the region the "Bay of Smokes" from the many Indian campfires he saw. He passed the Santa Barbara area, noting its many large Chumash villages. He sailed at least as far north as Cape Mendocino, and may have been the first to discover Monterey Bay. Cabrillo died of an injury received on the trip, and was buried on San Miguel Island. Even though his journey was completed successfully by his second-in-command, Cabrillo's discoveries were little noted or remembered. He and his mate compiled many important ethnographic and geographical observations in the ship's log, however, which survived the voyage.

During the next two centuries, Spaniards visited California only occasionally. Spanish exploration waxed and waned according to the fortunes of the Mexican colonial administration, the politics in Europe, the threat of foreign competition on the colonial frontier, and the Manila trade. Miguel López de Lagazpi had conquered the Philippines for Spain in 1565-71, only a little later than Cabrillo's exploration of the California coast. Manila, the Spanish colonial capital in the Philippines, soon became an important trading center for such Asian goods as tea, spices, silk, furniture, and porcelain; these were exchanged for Mexican silver, and trading fleets brought goods from Manila to Mexico for transfer to the Atlantic coast and eventual shipment to Spain. The profits from the Manila trade were immense, but Spanish merchants soon persuaded the king that Mexican colonial merchants and their ships were taking too large a share. The king responded by reducing the Manila fleet to a single galleon yearly, with profits limited to the Spanish crown and certain Spanish merchants (although Mexican merchants were able to use bribery to buy space aboard the ship; Lavender 1972: 26-27).

When the galleon left Manila for Mexico, it sailed north to catch the favorable winds and currents. As a result, it struck North America far to the north of Mexico's Pacific port at Acapulco. Usually landfall was made along the California coast. The eastward passage was long and arduous. Crews were usually emaciated and scurvy-ridden before they reached land, and the ship was especially vulnerable to storms and pirates. This made the yearly galleon voyage a risky undertaking, and led Spain to think of building a naval base in California to receive the galleon and provide escort to Acapulco. In the end, however, the government decided that the maintenance of a distant base was too risky and expensive, and that the galleons would have to get to port on their own.

Then, in 1579, the British navigator Sir Francis Drake reached California. Circumnavigating the globe, Drake had rounded the tip of South America. He made his way north along the Pacific coast, looting several Spanish settlements along the way. Finding the coast above Mexico to be inhabited only by Indians, he sailed as far north as the Point Reyes area, where he stopped for five weeks to careen and repair his vessel, the *Golden Hind*. The exact site of this landing is a matter of hot debate; it could have been any of several sites from what is currently called Drake's Bay to Tiburon. Kroeber (1925: 275) reports that while Drake was ashore, he interacted with the local Indians. A number of European trade items have been found in archaeological sites of the area and some might be evidence of Drake's visit (see Fig. 74). A brass plate, purportedly inscribed by Drake to commemorate his discovery of California and his claim of "New Albion" for the British crown, was found in the area in the 1930's. Recent research has cast doubt on its authenticity, however (Heizer 1972).

The British did not follow up Drake's voyage of discovery with a colonizing effort, so they had no further impact on California or its native cultures (Forbes 1969: 23-24; Hutchinson 1969: 52-54). The Spaniards, however, were seriously alarmed by Drake's incursion and the threat it posed to their Pacific colonies and the newly developing Manila trade. They reconsidered the problem of establishing a presence in California. Sebastián Rodríguez Cermeño, captain of the Manila galleon *San Agustín* in 1593-95, was ordered to reconnoiter the coast on his return voyage in search of a favorable harbor for estab-

Fig. 74. This 6d. silver English coin, minted in 1567, was discovered at the Marin County site CA-Mrn-193, a Final Pacific Period coastal shell midden. It might be a relic of Drake's visit in 1579, but could also have come from a Spanish ship such as Cermeño's, since coins circulated internationally. Note the hole in the perimeter of the coin: California Indians often sewed pierced coins on their costumes as ornaments. The coin thus was substituted for a shell ornament in an Indian value system, an example of the limits of the impact of contact with Europeans on Indian cultures at that period. (Courtesy of the Lowie Museum of Anthropology, University of California, Berkeley)

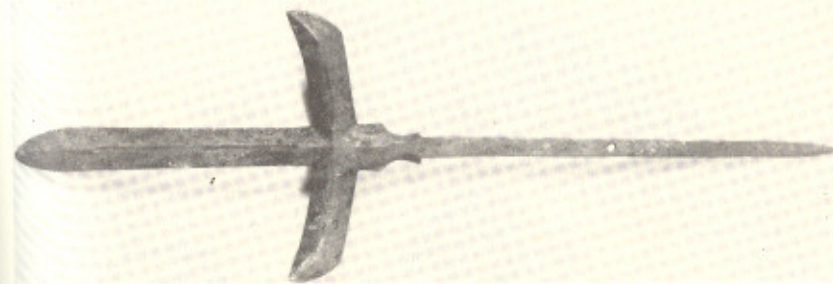
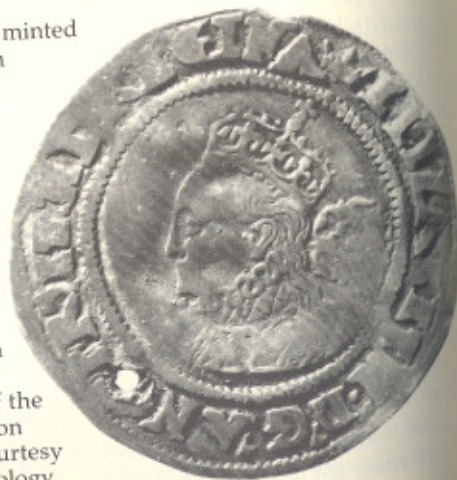


Fig. 75. This Japanese iron spearhead of the Magari Yari class was excavated at the Final Pacific Period site CA-Mrn-207 in Marin County. It represents the variety of Asian goods that made their way into coastal shell mounds. Since the goods tend to be concentrated on the Marin County coast, the most likely explanation for their occurrence is that they came from one or two shipwrecked Manila galleons, such as Cermeño's *San Agustín*, which was wrecked off Drake's Bay in 1595. (Courtesy of the Lowie Museum of Anthropology, University of California, Berkeley)

lishing a settlement. But his vessel foundered while at anchor in Drake's Bay, and the crew returned to Mexico only after a harrowing voyage in a small open boat. The shipwreck scattered a fortune in Asian trade goods along the beaches (see Figs. 75 and 76), and many objects found their way into archaeological sites around Point Reyes (Heizer 1941; Meighan 1950; Meighan & Heizer 1952).

The Mexican Viceroy, the Count of Monterrey, then sent Sebastián Vizcaíno on a similar mission in 1602-3. He explored the coast in three light ships thought more suitable for the treacherous waters of California. Vizcaíno apparently sailed as far north as Oregon, but, like Cermeño, failed to discover San Francisco Bay. He did discover the bay at Monterey, however, which he named in honor of the Viceroy in hopes of being appointed captain of the next Manila galleon. Unfortunately for Vizcaíno, the Count was soon ousted from power, and both Vizcaíno's dreams and the plans for colonizing California were abandoned.

During the next 150 years California was largely neglected by Spain. Trading ships from Asia occasionally foundered on the coast, or stopped for repairs, water, or provisions. Spanish artifacts and Chinese porcelains were acquired in small numbers by coastal Indians. A few surviving sailors from wrecked ships, or escapees from ships laying over, may have reached shore, either to be killed or to join Indian communities.

Hostilities occurred occasionally between the Europeans and In-

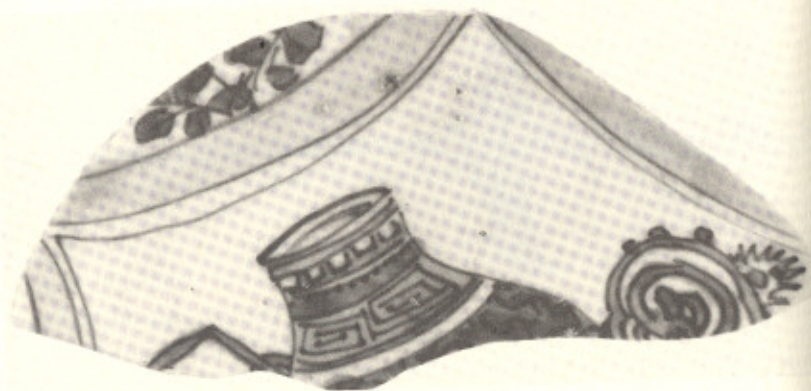


Fig. 76. This sherd of decorated Chinese porcelain was found during the excavation of CA-Mrn-232, a Marin County shell midden at Point Reyes National Seashore (fragment about 3 × 7 cm). A number of such sherds have been found along this stretch of coast, perhaps all from the cargo of the *San Agustín*. Whether the dishes were used or kept by the Indians as rare objects is not clear, in contrast to the coin shown in Fig. 74. (Courtesy of the Lowie Museum of Anthropology, University of California, Berkeley)

dians, sometimes arising from the kidnapping of Indian women by sailors. Spanish genes may have been added to the Indian genetic stock because of rape or marriage. And episodes of disease were probably introduced by the Europeans to the nonresistant Native Californian populations. Although archaeological research has shown that the Native Californian population declined after the end of the Final Pacific (Cook 1976a, 1978), it may be that the population peaked before the end of the Final Pacific, and that diseases introduced before permanent Spanish settlement affected the Indian populations. Whatever the timing and the causes of the decline, it was apparently confined largely to Indians living along the coast, and had comparatively less impact on inland groups. By and large, the contacts were brief and had relatively little effect on Native Californian culture as a whole. All in all, Indian-European relations were relatively amicable at this time, marked perhaps as much by mutual curiosity as anything else.

The Spanish government's attitude toward California's colonization began to shift again around the end of the seventeenth century. A pearl fishery was developed in the Gulf of California. To make it more secure, the Spanish launched an effort in cooperation with the Jesuits

to establish a chain of missions and military outposts among the Indians of Baja California. In 1702, Padre Kino, the founder of 26 missions in the American Southwest, reached the Colorado River. He realized that California was not an island, as had been previously believed, and that outposts in both Baja California and Alta California could be provisioned by land rather than by the more hazardous sea route. Kino died in 1711 without the inert colonial government in Mexico City acting on his idea, but it remained in circulation among Mexican intellectuals for the next half century.

Then, in 1747, the Russians discovered the Bering Strait and began to develop their own colonial empire in Alaska, expanding slowly down the coast. In 1763, the British wrested Canada from the French, and began to explore its western regions for possible commercial exploitation. Spain at last perceived the threat to its northern colonial frontier and moved to secure it. José de Gálvez was sent by the king to Mexico City as Visitador-General to take over the colonial government and revitalize it. Gaspar de Portolá, then governor in Baja California, was given administrative authority to colonize and govern Alta California, and was directed to lead a combined land-sea expedition to begin settlement before the end of the 1760's (Lavender 1972: 34–38). The era devoted solely to exploration had come to a close. Spain was about to embark on a wholly new enterprise in California. Of course, most parts of California were still largely unknown to the outside world, and exploration by Europeans would continue for many years.

The period had relatively little impact on California's archaeological record. Foreign visitors left few material remains to mark their visits, and Indian cultures were not significantly disrupted by these contacts. One of the most important contributions of these visits was the diaries and journals kept by some explorers describing these trips and the lands and peoples they encountered. Made by untrained and sometimes barely literate men, these earliest historical accounts provide a few shadowy glimpses of Native Californian cultures at the peak of their development. Even though, for the most part, these men could hardly be considered "unbiased observers," they have provided valuable information about such things as the appearance of the Native Californians they met and the locations of their settlements. Archaeologists and historians have found these documents to be of great value in reconstructing ethnographically known societies (Forbes 1969; Heizer 1978a; Heizer & Almquist 1971; Heizer & Whipple 1971; Hutchinson 1969; Lavender 1972; Schuyler 1978).

The Hispanic Stage (1769-1822)

European culture, as opposed to individual Europeans, reached California in the spring of 1769 when Gaspar de Portolá's expedition landed at San Diego. Gálvez's program for securing Mexico's northwestern frontier called for a few hundred priests, soldiers, and settlers to conquer and occupy a region nearly as large as Spain itself, a region already occupied by over 300,000 Indians. As improbable as the plan seems, it was based on Spain's largely successful experiences in northern Mexico, the Southwest, and Baja California, where indigenous societies were poorly equipped to resist the Spaniards' weapons and military skills.

Gálvez's program called for the establishment of three kinds of institutions: military garrisons (*presidios*), religious agrarian institutions (*misiones*), and civilian settlements and ranches (*pueblos* and *ranchos*). The program aimed to develop a gentry consisting of independent farmers, ranchers, and merchants and administered by local officials under the ultimate authority of the Viceroy and the King. The gentry was to serve as a militia to support the army in resisting Russian and British expansion. The system was to raise all its own food, to produce raw materials for export to the mother country, and to provide a market for manufactured goods exported from Spain and her more developed colonies. The new colony was to be prevented from having commerce with other European powers so as to ensure Spain's advantage (W. Bean 1977; Fages 1937).

The Spanish government would have liked to settle its frontiers with loyal citizen colonists who could have created an instant bulwark on the empire's borders, but it had learned through prior experience that few Spaniards could be lured to such remote regions. Failing that, the goal became the creation of a population of peasants and tradesmen from the native peoples who already occupied the region. For this reason, religious missions were made the center of the colonizing effort. Missionary fathers converted the natives to Christianity and taught them the arts and crafts of civilized life, transforming them in the process from scarcely human savages (in the Spanish view) to intelligent beings—*gente de razón*. If the Indians proved incapable of receiving instruction owing to their inability to appreciate the superiority of Spanish culture, experience in Mexico had shown that the presence of soldiers would lead to the creation of a new generation of mixed-blood peasants (*mestizos*) whose loyalty would be to Spain rather than to the traditional cultures of their Indian mothers.

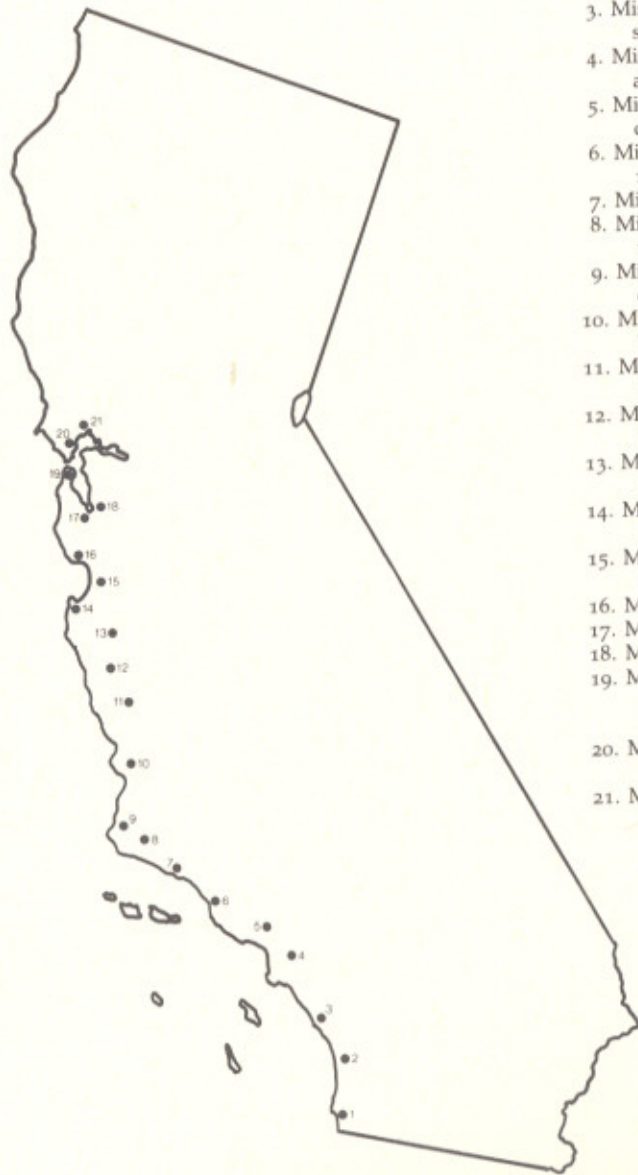
Spain had had earlier experience with missionary programs. The

Jesuit Order had built missions in northern Mexico, the Southwest, and Baja California. The government intended to keep its missions operating only as long as it took to civilize the Indians—an estimated ten years. Afterward, each mission would be converted to the status of a parish church, its converts assuming civilized status as new farmers and ranchers. The mission lands would be given over to the converts, and the mission flocks and herds would be dispersed to stock the new enterprises. In time, the Spanish Crown grew suspicious of the loyalty of the largely non-Spanish Jesuits, and in 1767 removed them from the mission system and brought in the Franciscan Order to replace them. Thus, when Gálvez directed Portolá to mount a colonizing expedition for Alta California, it was the Franciscan fathers, under the leadership of Padre Junipero Serra, rather than the Jesuits, who were called on to establish the mission system.

Portolá led the first expedition of colonists from Mexico along the route suggested by Padre Kino nearly a century before: overland across the Sonoran and Colorado deserts—stopping first at San Diego to be resupplied by ship—and then north to Vizcaíno's anchorage at Monterey (Brandes 1969; see also Map 45). Over the next 52 years, 21 missions were founded by Padre Serra and his successors along the coast between San Diego and Sonoma, as well as a number of modest chapels and *asistencias*, or administrative branches of the missions. Two formal pueblos were chartered and built within the first ten years of settlement, at San Jose and Los Angeles; and military presidios were established at San Diego, Santa Barbara, Monterey, and San Francisco (see Figs. 77-79).

The Spaniards concentrated their settlements along the coast for several reasons. Indian populations were dense there. The coast could be defended and resupplied by sea with comparative ease and speed. Interior settlements would have presented greater logistical difficulties and heavier reliance on the extremely slow overland route from Sonora. And the coastal Indians already enjoyed to a considerable measure a settled village life, meaning that civilizing them, in Spanish terms, would be less challenging than the civilizing of, say, the more nomadic desert peoples. Development of the California colonies proceeded steadily, and by 1822 the non-Indian population in California had risen to 3,750 people (Hutchinson 1969: 64; Lavender 1972: 74-79).

As each mission was founded, a population of Indians was brought to it from the native villages of the vicinity, usually by force. The imprisoned native populations were used as slave laborers to build the missions, outbuildings, waterworks, and other facilities. In return,



1. Mission San Diego de Alcalá, 1769
2. Mission San Luis Rey de Francia, 1798
3. Mission San Juan Capistrano, 1776
4. Mission San Gabriel Archangel (Arcángel), 1771
5. Mission San Fernando Rey de España, 1797
6. Mission San Buenaventura, 1782
7. Mission Santa Barbara, 1786
8. Mission Santa Inés (Ynez), 1804
9. Mission La Purísima Concepción, 1787
10. Mission San Luis Obispo de Tolosa, 1772
11. Mission San Miguel Archangel (Arcángel), 1797
12. Mission San Antonio de Padua, 1771
13. Mission Nuestra Señora de la Soledad, 1791
14. Mission San Carlos Borromeo (Carmel), 1770
15. Mission San Juan Bautista, 1797
16. Mission Santa Cruz, 1791
17. Mission Santa Clara, 1777
18. Mission San José, 1797
19. Mission San Francisco de Asís (San Francisco or Dolores), 1776
20. Mission San Rafael Archangel (Arcángel), 1817
21. Mission San Francisco Solano (Sonoma), 1823

they were taught the skills of brickmaking, ceramic-tile manufacture, weaving, pottery making, woodworking with metal tools, baking, cultivation, and ranching, among others. Conversion to Christianity was often accomplished by trickery, bribery, or force. A few Indians became literate, and some used the European painting techniques they had been taught to produce pieces for altar decoration. Some assisted the Spanish soldiers. Most, however, led existences of unrelieved misery and toil under close confinement (Heizer & Almquist 1971: 6–11).

These so-called "Mission Indians" were taken from a dozen or more Native Californian cultures (Shipek 1978). At the height of mission development, an estimated 55,000 Indians lived at the 21 missions, out of a total state population of between 260,000 and 270,000 (Cook 1976a). The numbers at the missions were raised to that level only by repeated raids by soldiers on "wild Indian" settlements, for population losses at the missions were consistently high. High death rates owing to disease, malnutrition, abuse, and culture shock horrified many of the padres, but the mission fathers were committed to their program and could do nothing to stem the loss of life (Heizer 1974a). Mission marriage and baptismal records show that the marriages and births among the Indian neophytes were far too few to replace the losses from death. Many Indian women regularly practiced abortion to prevent births, and many mothers who bore children of Spanish soldiers killed their babies (Lavender 1972: 82–90).

Mission losses were furthered by the escape of neophytes. Spanish troops pursued bands of escapees as far as the Central Valley, and recaptured Indians were routinely flogged, imprisoned, or placed in

Map 45 (facing page). Locations of Spanish missions in California and their founding dates. Spain hoped to secure the northwestern flank of its American colonial empire against Russian expansion through a settlement-and-pacification program. The plan included military garrisons, civilian towns, and religious missions. Of these elements, the missions were most crucial, because in them the Spanish hoped to organize Indians to provide the program's labor force and the population for a future peasantry loyal to the crown. The plan was developed from Spain's earlier experience in colonizing Baja California and the American Southwest. In these earlier efforts, the Jesuit Order had directed the mission programs, but the Jesuits fell out of favor with the Spanish government just before the launching of the California program. The Franciscans therefore established California's mission chain, starting with the first settlement in 1769 at San Diego and continuing until the Mexican Revolution of 1822 ended Spain's colonial programs in North America. The 21 missions established in that period were all located near the coast, since the only practical means of provisioning them was by sea.



Fig. 77. Mission Santa Barbara. This 1938 photograph shows the restored chapel with the front of the galleried compound to the left. The church structure typically formed a side of the mission compound. Dormitories for priests, neophytes' barracks, offices, kitchens, classrooms, storerooms, and workshops all formed part of the compound. Stables, barns, more workshops, and other outbuildings were built nearby. The mission compound formed a self-sufficient community for two thousand or more people. (U.S. Forest Service Photo)

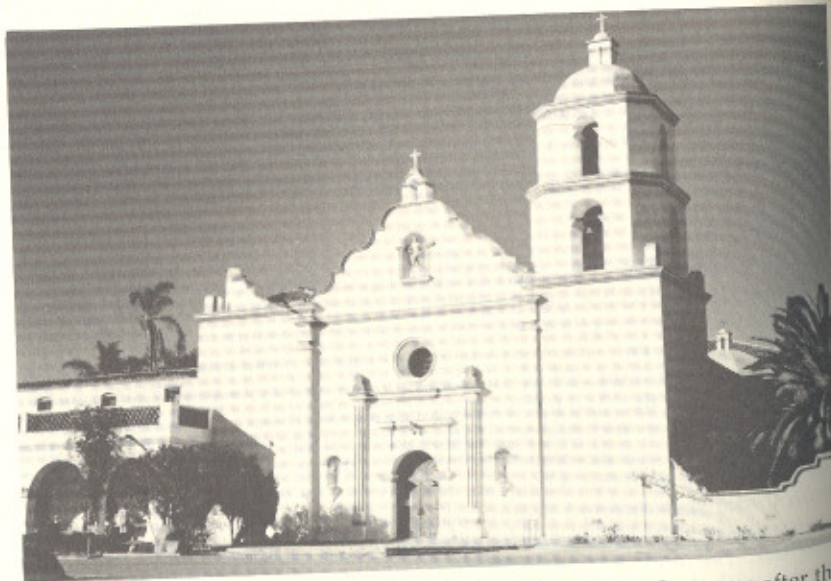


Fig. 78. Mission San Luis Rey de Francia, built in 1798 (twelve years after the Santa Barbara mission), shows a slightly more Moorish flavor in its embellishments, though its compound design is similar. The mission cemetery, to the right of the church, has some graves dating back to the mission period. Some cemeteries were combined with formal gardens, partly for aesthetics and partly for practical reasons. The combination thus conserved space close to the mission and allowed the fathers to grow a number of European plants close at hand: fig trees, grapevines, and seasoning herbs, for example.



Fig. 79. Mission San Francisco Solano, built at Sonoma in 1823, is unusual in several ways. The last of the California missions, it is the simplest in architecture, although it employs the basic compound form. It is among the smallest, it is the farthest north, and it is the only one built under Mexican rule. Plans for the mission were developed by the Franciscans while Spain still ruled, but the Mexican Revolution occurred before construction began. The Franciscans were under suspicion after the Revolution because most were Spanish and had no particular loyalty to the new government. This mission was their last major project in California. Its simple style reflects both the straitened finances of the mission system and the growing influence of the "Monterey" style of colonial architecture: broad verandas supported by posts rather than the colonnaded arched walkways favored by the Spanish; low, pitched, tiled, overhanging roofs; simple post-and-lintel doorway construction; thick walls pierced by deep window recesses. Of all the missions, this is perhaps the most truly Californian.

stocks (Stickel & Cooper 1969). Escape was made even more risky because the Spaniards gradually eliminated the surrounding native villages, so that escapees had nowhere to go (see Map 46). Demoralized, cut off from access to family and food, and physically debilitated, the escapees had little hope of survival in their former homeland. Some escapees became raiders on the missions, trying to help others escape or stealing horses and goods from mission lands (W. Bean 1977; Heizer 1974a; Shippek 1978).

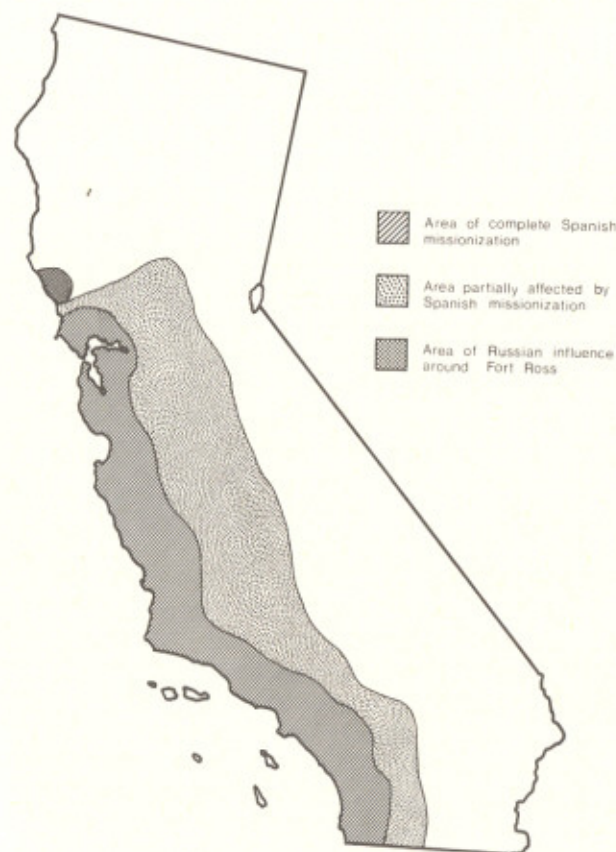
Although Spain did succeed in settling coastal California, the mission program failed to create a population of farmers, ranchers, and merchants from the neophytes. After 1810, the mission populations declined faster than they could be replenished, and most of the mis-

sions suffered from greatly reduced populations by 1820. Then, in 1821–22, Mexican revolutionaries joined with compatriots in many other parts of Latin America to overthrow their Spanish colonial governors. An independent Mexican nation was created. California had not been directly involved in the revolution, but Mexico's independence brought it control of the former colony. Spanish civil and military authority was replaced by Mexican, and the Hispanic era in Alta California was brought to a close.

Early European intrusion and settlement in California had different consequences than elsewhere. The fur trade dominated many of the early contacts elsewhere between Indians and Europeans, and often the fur trade was itself disruptive to traditional cultures. But in some areas (such as the Pacific Northwest, New York, New England, the Rockies, and the Great Lakes) it also led to temporary prosperity as Indians became participants in larger, cash-oriented economic systems. Even on the Great Plains, European intervention resulted in the spread of the horse, which led in turn to a focal emphasis on bison hunting.

Spanish colonization had a different result in California. No California group developed an economic partnership with the Spanish; in fact, the mission economies were less productive than the Indian economies they replaced. Although the Spaniards were technologically more sophisticated than the Indians in several respects, their economic institutions in the mission system were less complex and integrated than the traditional systems had been. The mission program disrupted the focal economies of California. Even the groups that were not missionized felt this adverse impact. Spanish settlement barred many of the remaining California Indians from traditionally important resources, such as clamshell beads, abalone shells, Catalina steatite, shellfish, and asphaltum. Vitally important trade relationships between the coast and the interior were severed. The inevitable result was an economic decline even for peoples who had never seen a European. Even had the Spanish been more careful in their missionization, they probably would never have been able to enter into economic partnership with non-mission Indians. The Spaniards had come for souls and land, not just furs or minerals.

Events showed that, from the Spanish perspective, colonization was begun none too soon. The feared Russian presence materialized in the early 1800's. Russia had been developing an Alaska colony for a half century, and had begun to explore southward in search of furs. Unlike the Spaniards, the Russians were interested in acquiring raw materials rather than settling the land. Their main target was the California sea otter, whose fur could be sold in China at great profit. In



Map 46. Areas of Spanish and Russian influence in California, 1769–1822. The coastal hills and valleys from San Francisco Bay southward were effectively dominated by Spain, but the influence of Spanish presence was felt by California Indian communities as far east as the Sierra Nevada and the Colorado River. The Russian presence, though much more localized and limited in purpose, effectively limited the northward expansion of Spanish colonies. Russian influence was felt far to the south of Fort Ross, since sea otters were hunted as far south as Morro Bay and slaves were taken from as far south as San Nicolas Island.

1811 a Russian post was established at Bodega Bay, north of San Francisco. The next year it was moved to a more secure setting at Fort Ross, where it was maintained until 1841.

Russian relationships with California Indians were quite different from those of the Spaniards. The Russians did some of their own

trapping, aided by the Aleut Indians they brought with them to California, but they also traded for furs with local Pomo Indians. The Russians and Aleuts were guilty of several atrocities committed against Native Californians, such as the San Nicolas Island massacre in 1830, in which all but twenty of the island's population were killed (Heizer & Elsasser 1963). In general, however, Russian relations with Indians were more amicable. A number of cases of Russian-Pomo bilingualism are known, for instance, and formal marriages between Russian men and Pomo women have been recorded. Although the Russians were not necessarily more humane than the Spaniards, their desire for furs, their disinterest in colonial settlement and land acquisition, and their desire for amicable trade relations all served to foster a better atmosphere between them and the Indians (Johnston 1962: 103; Kroeber 1925: 633-35). These conditions also meant that the Russians had far less impact on Native Californian cultures than the Spaniards had—and the Russian efforts are correspondingly less visible archaeologically.

Spanish settlement caused dramatic changes in California's archaeological record (Moriarty 1971). European styles of architecture and technology were introduced (Brandes 1969 and Moriarty & Weyland 1971; see Figs. 77-79). Metal came into use for the first time and spread to many Indian communities. Pottery had been rare prehistorically except in the southeastern deserts, where the manufacture of a plain, brown pottery ware known as Tizon Brownware appeared around A.D. 1000 (Evans 1969); but the Spaniards developed extensive ceramic industries in order to make containers and roof and floor tiles, and introduced the making of adobe building bricks. Domestic animals were imported to provide food, raw materials, plow labor, and transportation. By 1820, most of the missions had between 10,000 and 20,000 head of sheep and cattle and hundreds of horses in their pastures, and pigs and chickens were kept in the mission compounds. Studies of animal bones found at mission sites show that the neophytes, who did the bulk of the work at the missions, were taught Spanish styles of animal butchering and usually abandoned their traditional styles even when butchering game for their own use (Hoover 1979). Wheeled vehicles were introduced, particularly the ox-drawn *carreta*, a simple cargo wagon with two solid wooden wheels that turned on a log axle (Fig. 80). Even a few finer carriages were imported by colonial administrators and military commanders (Moriarty 1973). Although the padres frequently rode mules, horses were ridden by military, government, and civilian personnel, including some Indian neophytes trained as vaqueros to herd cattle from horseback.



Fig. 80. The *carreta* was the basic cargo vehicle under Spanish and Mexican rule in California. Drawn by a pair of yoked oxen, the cart provided slow but efficient transport in a land of few roads. Its simple design meant that it could be made by semiskilled carpenters using the simplest hand tools and local raw materials. It could be repaired easily, but was so solid that it did not often break down. And it did not require expensive metal fittings or highly crafted wood components that had to be imported from Europe. Consequently, it was perfectly adapted to the needs of a small colony on the remote fringe of the empire.

Many of the material remains from these activities have made their way into the archaeological sites that mark the missions, ranchos, pueblos, and remaining Indian settlements of this era.

Systematic agriculture, introduced into California by the Spaniards, had a profound effect on the native California resources and landscape. Several missions developed extensive waterworks to supply their buildings and fields. European crops were introduced: wheat, oats, barley, and other grains, grapevines, fruit and nut trees, vegetables, flowers, herbs, medicinal plants, and textile fibers. California's Mediterranean climate proved to be an especially hospitable setting for many species. In addition to the deliberate introductions, seeds

from European grasses were carried inadvertently into the state in the wool of Spanish sheep. These hardy European grasses proved far more vigorous than the native perennial bunchgrasses, and within a few generations the state was blanketed with wild oats, mustard, star thistle, and other exotic species while the original grasses became nearly extinct. A century later, even many California Indians no longer realized that wild oat was not an original feature of the environment (see, for example, Goldschmidt 1951).

The adjustment by Europeans to colonial life is reflected in the artifacts they left behind. The immigrants tried, insofar as possible, to lead lives with which they were familiar. They imported some material goods, including weapons, iron tools, glass, and fine fabrics. But it was not possible to import everything they needed, since costs were high and shipping time-consuming and unreliable. Metal, in particular, was comparatively hard to obtain and therefore relatively rare and valuable. As a result, craftsmen, both Hispanic and Indian, produced a variety of European-style goods made of local California materials.

Virtually all local craft production was done in the missions, since there was only a tiny Hispanic military and civilian population, and the missions were the center of the Spanish attempt to concentrate the indigenous population. The padres introduced a variety of European crafts and skills, such as adobe manufacture and construction, tile making, pottery, hide tanning, weaving, blacksmithing, candle and soap production, baking, leatherworking, carpentry, farming, winemaking, and herding. These they taught to the captive mission Indians who, in turn, provided almost all the labor for these crafts. For the Indians who were missionized, much of their traditional culture and technology was replaced by Hispanic craft activities and technologies.

The loss of traditional technology was most complete in those areas in which Indian activities were in conflict with mission activities. This was particularly true for objects associated with men, whose traditional activities, such as hunting, fishing, warfare, and ritual, were almost totally prohibited by the padres. In other cases, certain kinds of activities practiced by Indians were not regarded as conflicting with Spanish goals and were allowed to persist. For example, at missions where married couples were provided family housing, women were allowed to practice their own domestic activities. These women continued to make and use such traditional items as baskets and milling tools. In still other cases, mission crafts involved skills with which Indians were already familiar, such as processing animal hides; in these cases both Indian and Spanish tools were used. The distinctive

archaeological assemblage of mission and traditional artifacts reflects the emergence of a social order based, no matter how one-sided it may have been, on an interaction between these two cultures to produce a synthesized adaptation to California.

Another element was added to this era's archaeological remains by Mexican mestizos. Many of the farmers, ranchers, merchants, and infantry soldiers brought to California were Mexican rather than Spanish by birth, and in most cases of mixed Spanish and Mexican-Indian descent. These immigrants brought with them a mestizo culture that combined Spanish and Mexican elements into its own hybrid creations. The cultivation of corn, beans, chiles, and squash, the milling of grain on four-legged, well-shaped metates, the use of adobe rather than the Spanish plastered stone masonry for architecture, the wearing of poncho-style serapes and huge-brimmed sombreros, and a diet based on tortillas and frioles were all mestizo contributions rather than Iberian. Although mestizos never constituted a large part of the population in California during the Hispanic period, some became individual landowners and rose to positions of growing importance as the Spanish plan to have Indian neophytes assume much of this role failed to materialize. Excavations at the Sanchez adobe near Pacifica, which was a farm that grew wheat to help feed Mission Dolores in San Francisco, reveals the characteristically mestizo nature of such holdings (Drake 1952; Miley Holman, pers. comm. 1980).

Eventually, missionization all but extinguished the traditional cultures of the coastal Indians in the 600 miles (965 km) between Tomales Bay and San Diego (see Map 46). In the area of the missions, Indian populations (apart from those confined to the missions themselves) were reduced by 90 percent or more, or even completely wiped out, and mission populations were maintained only by drawing from the surviving surrounding populations. Some Indians fled inland to areas held by other groups, where much of their own language and culture was submerged (Stickel & Cooper 1969). Individuals attached themselves in some cases to farms and ranches as peons or serfs, in order to survive after their own communities were destroyed. Montgomery's (1968) fictional account of the fate of Chief Marin, finding himself bereft of family and community upon release from the prison at Mission San Rafael, evokes this condition. From these few, and from the most resilient of the neophytes, a few representatives of some of the coastal cultures survived, and their descendants managed to bring some knowledge of their traditional cultures into the twentieth century.

As noted earlier, Hispanic colonization even affected Native Califor-

nian groups that were not in direct contact with the missions. In addition to the breakdown of the trade system and the lack of access to coastal resources, such important resource areas for people in the Coast Ranges as the grasslands in the river valleys and the groves or oaks were gradually preempted by Europeans for grazing lands. Pursuing Spanish troops periodically raided the Central Valley, leading to further hostilities. The permanent Hispanic population on the coast became a source for disease, to which the Indians had no resistance. By the nineteenth century, epidemics swept through the interior Indian populations as well as through the mission peoples. Thus the impact of Spanish settlement was felt far from its center, almost invariably to the disadvantage of the Indians.

The Mexican Stage (1822-46)

Inspired by the United States and French revolutions, liberal fervor swept through much of Latin America during the first two decades of the nineteenth century, and Spain soon lost almost all her New World colonies. Mexico, after winning her freedom in 1822, established a republic under a constitution modeled after that of the United States. In becoming independent, she assumed control of the colony of Alta California (Map 47). Spanish civil and military authorities were replaced by Mexicans under the new governor, José María Echeandía. This did not lead to wholesale cultural change in California's European population, but several important changes did occur.

The first change concerned relations between California and other nations. Spain had closed her colonies to ships of other European powers in order to preserve her trade monopolies. Visits by foreign ships to California ports were notable mainly for their rarity. Mexico, however, relaxed this practice. First England, and then the United States, began to send trading ships to California ports. California's major export items of the time were cattle by-products: hides for leather and tallow for candles and soap. At the time of the Mexican Revolution most of California's cattle were in mission hands, and the mission fathers turned to hide and tallow production as a source of badly needed income. Indian neophytes were put to work driving cattle down to the shore to be slaughtered. Hides were baled and stored in sheds along with the tallow rendered from the carcasses. When a Spanish ship landed along the coast, the mission would entertain the captain, strike a bargain, and row the cargo in small boats out to the anchored ship. With secularization, this trade passed into the hands of the *rancheros*. Chace (1969) points out how dependent the *ranchero* economy was on the cattle trade described so vividly by Richard Henry Dana in his *Two Years Before the Mast*.



Map 47. Areas of Mexican influence, 1822-46. The Mexican Revolution, completed in 1822, ended Spain's occupation of California. The new Mexican republic took over the Spanish colonies, gradually transforming California to a nearly independent, self-sufficient state whose economy was based on cattle ranching and foreign trade. Because expanding pastoralism took Mexican settlement much farther inland than Spanish settlement had gone, the number of California Indian communities directly affected by foreign colonization was much larger than it had been under Spain.

Mexico fostered this foreign trade partly to stimulate the colony's economy and partly because it provided the only large source of income available with which to finance its colonial administration. California's internal economy at this time operated principally on the barter system. Little cash was in circulation, in contrast with the economy during the Final Pacific Period. The Mexican government lacked

the resources to support troops and civil servants in distant colonies, so it raised the needed funds by opening its ports and imposing duties on all foreign imports. Visiting ships were supposed to call at Monterey, where customs inspectors levied the import tax (W. Bean 1977; Beardsley 1946). Furthermore, the growing Mexican population in Alta California created a market for manufactured goods, and U.S. and British shippers responded vigorously to supply this demand. As a result, Yankee and English goods appear in archaeological sites of this era, mixed with Mexican, Spanish, and Indian artifacts.

This growing trade began to bring commercial agents to the colony. When California was first opened to foreign trade, sales and orders were made by each ship's officers when vessels called along the coast. A captain would have to seek markets for his imported cargo, and then purchase a cargo of hides and tallow from whatever rancheros he could deal with. By having permanent representatives in the substantial communities at San Diego, Los Angeles, Santa Barbara, and Monterey, however, shippers could arrive to find their imported cargos already sold, distribution arranged for, warehouses of hides awaiting loading, and orders already taken for the next voyage. By 1845, more than 700 U.S. businessmen and their families had joined the 7,000 Mexican Californians living in the colony. These agents began to provide the colony's first commercial banking services. Since few financial resources were available locally, the Yankee agents began to provide funds and lines of credit to the Mexican rancheros, which strengthened the growing U.S. influence in the region.

Further U.S. influence resulted from visits by American fur trappers. With the opening of California's borders by Mexico, American trappers came overland to explore and exploit the interior. Jedediah Smith, who traveled up the Sacramento River, crossed the Klamath Mountains, and reached the sea in 1826, was the first of this breed. Although the fur trappers generally did not settle in California, they represented the first direct contact with foreigners for many interior Indian groups. These contacts very likely were responsible for the spread of diseases deadly to the native population. The great small-pox epidemic of 1830-33 in the Sacramento Valley, which may have killed as many as 60,000 Indians, was apparently started by a party of fur trappers traveling up the Sacramento River and on to Oregon in the fall of 1830 (Cook 1978: 92). So, in a fashion, the Americans had already become a forceful influence on Indian and Mexican cultures in California even before the War of 1846 ended Mexico's rule.

But by far the biggest change that the Mexicans made in California was the secularization of the missions. Some of the missions had been in operation for more than 60 years, far longer than Spain had

originally intended, and the Spanish government had actually begun to develop plans for terminating the missions when the Mexican Revolution ended its rule. Although the Mexican takeover did not bring about an immediate end to the missions, it did accelerate the process. For one thing, the new Mexican constitution granted full citizenship, at least in theory, to all persons born within the republic's boundaries and regardless of race—including the Indians. For another, the new governor, Echeandía, had been a revolutionary soldier and was an ardent civil libertarian. He began to develop plans for ending the role of the missions and bringing freedom to the Indians soon after he arrived in California in 1822. Agitation for the end of the missions grew in both Mexico and California during the following decade. It was accompanied by plans to bring more colonists to the area north of San Francisco in order to create a stronger bulwark against the Russians and British. Liberal Mexicans hoped to bring Indians into the colonial communities to create the kind of integrated society they saw developing in some parts of Mexico. Commercial advantage was also seen to follow from the development of a larger civilized population.

Three factors above all others complicated the issue of mission secularization for all concerned: politics in Mexico, the role of the Franciscan fathers, and the readiness of the Indians to become full-fledged citizens in Mexican terms (W. Bean 1977; Lavender 1972). Back in Mexico, bitter factional disputes broke out between liberals and conservatives, and the mission-secularization issue became entangled in this conflict. Communication between Mexico and California was so intermittent, and the strength of the Mexican government so reduced, that between 1828 and 1832 the province of Alta California became almost a *de facto* independent nation. Although the Mexican Californians shared all the differences raging at home, they found common ground in preferring their autonomy, which made any administrative plans from Mexico difficult to carry out. Nevertheless, the idea of secularization received considerable support, perhaps mainly because the Californians longed to appropriate the vast mission lands and herds for their own.

The Franciscans also were a problem because most of the padres were of Spanish birth and showed little loyalty to the new Mexican government; the padres were also the only group to provide genuine support for the Indians. Although Mexican liberals were committed to the ideal of full citizenship for all Mexicans, the dominating principle of self-interest precluded their making any real provisions for the protection of Indian rights in the event that the missions were finally closed.

The Indians themselves were scarcely prepared to leave the mis-

sions. After a half century of mission life, much of their original culture had been stripped away and the missions provided their only means of survival. Some individuals had attached themselves to Mexican communities as laborers, and among this group, poverty, disease, and alcoholism were rampant. Others had fled from the missions, joining groups of relatively undisturbed Indians. They were completely unwilling to return to any close association with the Spanish and Mexicans, and in some cases they raided isolated ranchos and mission herds. Altogether, the situation was not auspicious for the creation of a new, integrated society.

Nevertheless, the drive for secularization continued. On August 17, 1833, the Congress in Mexico City passed an act that called for the immediate transformation of the California missions into civil parishes (Lavender 1972: 102). José Figueroa, California's governor at the time, developed programs for the change. In theory, half of all mission lands, herds, seed stores, and farm machinery were to be turned over to the Indians in an enormous land reform that was to have created a population of indigenous peasant farmers and ranchers. The other half was to be managed by civil administrators for the benefit of the new towns that Mexico had planned to act as buffers against the Russian presence at Fort Ross and the British expansion in western Canada.

In reality, the Indians ended up with almost nothing, the new pueblos were not developed, and the programs to bring additional colonists from Mexico were thwarted. Instead, small numbers of the original Mexican Californians managed to seize almost all the rich mission lands and form huge ranchos. Private land grants had been rare until then: Spain and Mexico combined had made only 51 grants to individual citizens between 1769 and the completion of secularization in 1834. In the next six years, over 300 grants were confirmed by the Mexican government, and even more were awarded between 1840 and 1846 (Hutchinson 1969: 66-69; Lavender 1972: 105-7). In a remarkably brief period almost all the productive farm- and ranchland in the colony was handed over to a handful of Mexican families, together with vast herds of cattle, sheep, and horses. Secularization ushered in "the period of 'pastoral Arcadia,' which gave California the gauzy and nostalgic heritage of dashing *caballeros*, beautiful *señoritas*, and the 'cattle on a thousand hills.' In all truth, this was one of the largest non-nomadic pastoral societies the world has ever known." (Hutchinson 1969: 68; see Fig. 81.)

If the Californiano era was bucolic for the privileged few, for the mission Indians it was an even more devastating time than the mis-



Fig. 81. A typical ranch house of the Mexican Stage, the Diego Sepulveda Adobe was originally built to shelter cattle workers from Mission San Juan Capistrano during the Hispanic Stage. Its form, size, and construction are similar to the José Sepulveda Adobe described later. Its Monterey Colonial architecture (see Fig. 79) features a low peaked roof whose broad overhangs form verandas, thick walls of mission-brick adobe, and deep window recesses. The original roof was of tules sealed with tar. The structure was built between 1817 and 1823 on the south bluff overlooking the Santa Ana River in present-day Costa Mesa. Don Diego Sepulveda, a former alcalde of Los Angeles, took over the building in the 1830's and made it his home and the headquarters of the Sepulveda Estancia. Today it is preserved as a city park.

sion period had been. Robbed of their promised legacy, denied the support of the missions, and unable to return to their pre-Hispanic life, they suffered severe crises. The numbers of mission Indians plummeted from 30,000 to 10,000 in the first decade after secularization. Most survivors ended up as virtual serfs on the feudal-style haciendas of the Californianos. The mission fathers may have captured them and forced them into submission, but at least some measure of food, shelter, and clothing had been provided, a new religion had been offered to replace that which had been taken from them, and some provision had been made to prepare them for a new way of life. The rancheros simply took advantage of what little was left. A lively traffic arose in selling Indian children to become household servants (Cook 1978; Heizer & Almquist 1971). Even the majority of missions themselves fell into ruins and were stripped of their artwork and building materials.

The system of ranchos that arose after secularization spread into



Fig. 82. Like the missions earlier, Sutter's Fort had to be a self-sustaining community for its residents. For the decade before the Gold Rush it was the only source of help and supplies for European and American travelers in the Sierra and Central Valley. It has been reconstructed on its original site, and archaeology contributed extensively to the accuracy of the reconstruction. Shown here is one of the corner bastions with a Sally port at mid-wall to the right, largely hidden by brush. The walls enclosed a complex of buildings housing workshops, storerooms, living quarters, and even a primitive jail.

the Central Valley. It marked the first European settlement of that region and deprived the Indians of another critical resource zone. Land grants were awarded to non-Hispanics for the first time. In 1839 John Sutter received 11 leagues (roughly 1,000 square miles, or 3,000 km²) where Sacramento now stands (see Fig. 82). John Marsh purchased another 11 leagues between the site of Stockton and Mt. Diablo in 1836. John Bidwell acquired an equivalent tract between Chico and the Sacramento River in 1842 (W. Bean 1977; Lavender 1972).

Indians who lived in the Central Valley had either to accept the disruption of their lives and loss of life-supporting resources or to retreat into the Sierra and southern Cascades, which already were occupied by other Indian groups. The developing ranchos began to deprive In-

dians of access to the best fishing grounds, to the valley oaks and grasses, and to the migratory waterfowl, tule elk, and antelope. Surviving trade networks were disrupted. The well-integrated Pacific Period economies could no longer be maintained, nor could the large populations they supported. By 1845, California's Indian population fell to about 150,000 (Cook 1976a: 44). The Pacific Period way of life, which started to break down when Spanish settlement began, finally died at this point.

This did not mean the end of *every* form of traditional culture, or the death of all Native Californians. Rather, under the weight of severe population losses and the factors that had produced those losses, the structure of Pacific society collapsed. Even those cultures still outside the sphere of direct Spanish and Mexican influence were forced increasingly into a less focal, more diffuse economy. Reversion to a true Archaic economy was not possible, however. A true Archaic economy could not be restored because the movement of Indian groups was now severely restricted: Archaic-style seasonal migrations from the valleys to different environments in the high mountains could not be followed; and access to many critical resources was cut off. The remaining Indian groups were forced instead to diversify their diets, basing them on the resources available in their immediate territories. That strategy supplied less food than Archaic-style seasonal rounds, and populations fell accordingly.

The falling population levels themselves affected other aspects of surviving Native Californian culture, so that the distinctive social features characteristic of the Pacific Period largely or wholly disappeared during the Historical Period. Much of these cultures' social complexity rested on an economic base: trade and profit had helped to create social and economic distinctions within communities, and when trade was disrupted everyone was reduced to egalitarian penury. Many aspects of traditional life disappeared as specialists died without training their successors. And as the size and numbers of Native Californian settlements declined, the need for administrative specialists also declined. Village leaders, task group leaders, and craft specialists became unnecessary. Knowledge and skills disappeared with the people who knew and used them. Eventually even the very faith in the remaining order waned. New cults arose from desperation, promising to restore the old order through magic and ritual (DuBois 1939; Meighan & Riddell 1972).

The population decline traditionally has been blamed on the Native Americans' lack of resistance to European diseases. Equally important, but seldom mentioned, is the fact that many groups had already

been severely weakened by malnutrition following economic collapse, which heightened their susceptibility to disease. Even if European diseases had never been a major factor, the collapse of Pacific focal economies alone would have caused a substantial population decline.

This weakening was carried into California's interior by the spread of the rancho system. Designed to produce a cash crop, the rancho was actually incapable of supporting more than a relatively few people on a very large amount of land. In this respect it was in direct conflict with the Indians, who needed the same land to support relatively large numbers of people in a very different form of economy and society. In this conflict the Indians, who had been decimated by disease, armed conflict, and the breakdown of their whole cultural world, were no match for the determined, ever-growing onslaught from the outside world. The growing number of settlers entering California, the entry of trappers into many parts of the state, and the spread of actual settlement from the coast into the interior meant that this stage had more profound effects on Native Californian populations than ever before. Even Indians living in relatively out-of-the-way areas, such as the foothills of the Sierra, were affected by disease and the loss of access to coastal and valley resources. Interior southern California was similarly affected. Only in far-northern California could Indian society persist in a relatively unaffected way, because this rugged, remote area still lay beyond the reach of European interests. But events in Texas 1,500 miles to the east (2,400 km) were soon to have important consequences for California as a whole.

The Anglo-American Stage (1846 to the Present)

Mexico might have taken a firmer hand in California's development during the crucial period of secularization except that its energies were absorbed by the closer and bloodier Texas revolution. Tension along the Texas-Mexico border remained high for the decade after Texas independence in 1836, distracting the Mexican government from events farther west. The United States annexed Texas in 1845, precipitating a war between the United States and Mexico. California's 7,000 Mexicans, isolated from Mexico City, unable to receive serious support, and burdened by factionalism and the presence of nearly 1,000 restive Anglo-Americans (Americans of English descent), could scarcely defend their enormous province. The approach of war in 1846 triggered a rebellion, fomented by Lt. John Charles Frémont, among the Anglo-American dissidents, during which they tried to wrest control of central California from the Mexican officials

and set up the Bear Flag Republic. A number of Mexicans supported this venture. But only three weeks later, the U.S. military, led by General Stephen Watts Kearny and Commodore John Drake Sloat, seized California, disbanded the Bear Flag Republic, and declared California an American territory.

The next two years were times of unrest and confusion. The Americans took over the reins of local government and transferred California from a Mexican province to an American territory. Anglo-Americans moved into central California in growing numbers, soon equaling the Californiano population in the south. The American military officers who had seized California were uncertain whether to maintain Mexican law until directed to do otherwise or to impose U.S. law. As Anglos and Californians attempted to work out an accommodation to their new political reality, gold was discovered in the Sierra (W. Bean 1977).

John Marshall, an itinerant carpenter hired by John Sutter to build a sawmill at Coloma, east of Sacramento, made the discovery in January 1848. Sutter, realizing his vulnerability as a Swiss citizen with a Mexican land grant in a U.S. territory, tried to keep the discovery a secret, but word leaked out and within a few months thousands of Californians swarmed into the foothills of the Sierra. In December a speech to Congress by President Polk spread the news in the east. Over 150,000 miners and adventurers poured into California in the next two years. This Gold Rush sealed the fate of the remaining Native Californian cultures and pushed even the Californians into a subservient position (for the archaeology of Sutter's Fort, see Olsen 1961; Payen 1961).

The 1849 Gold Rush was an anomaly in the history of the American West, transforming what might have been a gradual evolution into sudden, dramatic, and revolutionary change, and introducing elements into California that otherwise might never have developed. Although most of the massive influx of people came from the eastern United States, people from dozens of other nations were also represented. San Francisco was transformed overnight from a small pueblo into an international city. Sacramento and Stockton grew up overnight where previously there had been no communities at all. Enormous tent cities at first, they were supply centers and points of embarkation for the goldfields. Hundreds of mining camps sprang up in the goldfields, including many that were made up of particular racial or ethnic groups: Chinese, Italians, Mexicans, Blacks, Hawaiians, Portuguese, French, and Native Californians are examples. Few camps have been explored archaeologically. Suddenly, California had be-



Fig. 83. This ground-stone crushing wheel, known to have been made by miners from Chile and photographed in 1942 in Sequoia National Forest, represents a low-energy method of ore crushing. The 1849 Gold Rush brought argonauts from many nations, many of whom had previous mining experience and brought the technology of their backgrounds with them. Many of them shipped to Panama from the Atlantic states and then crossed the Isthmus. Ships in this service, which had of course to circumnavigate the tip of South America, stopped at ports along the coast of Chile, Peru, and Ecuador before picking up the argonauts in Panama. Along the way, South American miners boarded the ships, and thus constituted a fair percentage of the passengers reaching San Francisco. By the mid-1850's most of these low-energy mining efforts had been replaced by technologically more advanced methods, as the rich ores were played out and more efficiency in refining was needed to extract gold profitably. (U.S. Forest Service Photo)

come extremely diverse ethnically, but this diversity had not yet been fused into an integrated society (see Figs. 83 and 84).

Life in the goldfields was often violent and lawless. Many argonauts were rootless, ill adjusted, and uneducated. Others were fleeing from eastern urban poverty, from discrimination, or from the law. Still others were law-abiding, middle-class young men seeking wealth and adventure. The preponderantly male influx lacked the tempering

influences of wives and children. Unlike the Anglo-American settlement of the Midwest and Great Plains, the '49ers did not bring with them the institutions of the community: civil government, schools, and churches. The goldfield camps and the cities servicing them sprang up largely lacking institutions of order and stability. They were characterized by large numbers of disaffected young males and

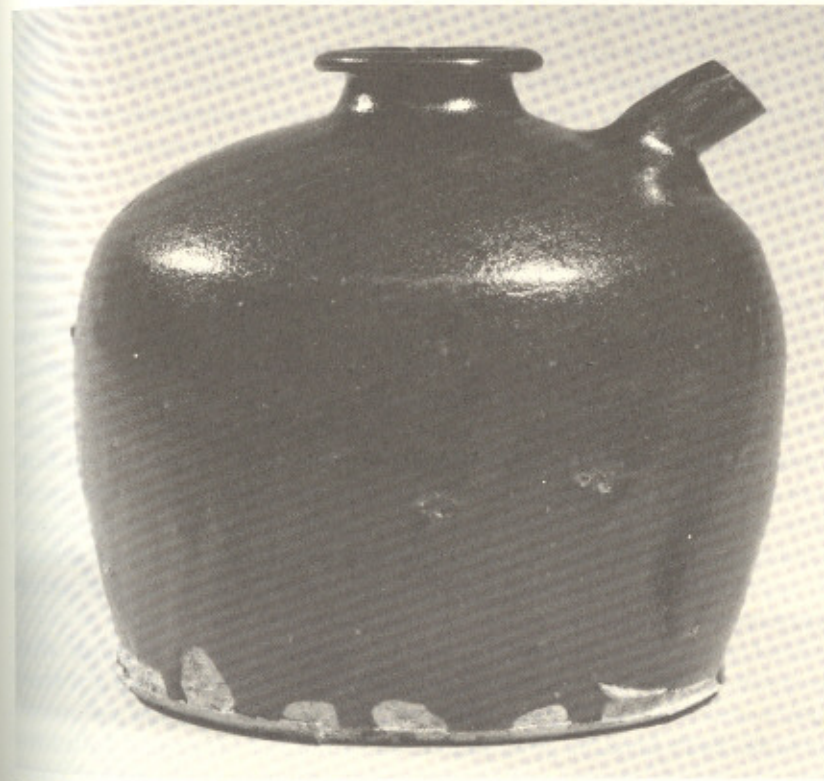


Fig. 84. Chinese soy sauce jug from a Plumas County mining campsite. Before the Gold Rush the Oriental artifacts that reached California were mostly luxury or exotic items destined for foreign trade (e.g., Figs. 75 and 76). But when Chinese miners joined the Gold Rush, they were mostly men of poor families whose goods were simple and utilitarian. This ceramic jug, found in 1912 by I. W. Follett, measures 5½ inches (14 cm) in diameter. An authority on California fish and a scientist at the California Academy of Sciences, Follett has contributed to dozens of archaeological studies by identifying the species of fish whose remains were found in sites. (Courtesy of the Lowie Museum of Anthropology, University of California, Berkeley)

an extraordinary mixture of races and cultures. In the absence of organized government, vigilance committees sprang up. The dispensing of vigilante justice periodically became an excuse for committing atrocities against the outnumbered and powerless ethnic minorities, especially the Orientals and Indians. Such an unstable situation could not long endure. Most of the mining camps failed when gold discoveries declined, and were abandoned as quickly as they had arisen. But California's Gold Rush differed from those in the Klondike and elsewhere. Of the masses of people who came to California, many stayed, even after the prospect of sudden wealth began to fade. This population formed much of the basis for the development of urban centers in the state. Though barely studied archaeologically and still not fully documented historically, the Gold Rush represents an unusual and fleeting but still pivotal moment in the history of urban civilization.

The stimulus of the Gold Rush precipitated California into statehood in 1850, only four years after its seizure from Mexico. The territory's growing population, its strategic location, and the desire to protect and control the goldfields all helped promote the statehood movement. Statehood in turn brought an involvement in a national political and economic system and an imposition on the state of a complex governmental structure previously unknown in California. Under Mexican rule, California had a colonial capital at Monterey, but each population center retained a fair degree of autonomy. The missions and military, although formally structured, also usually exercised only local control. Pueblos were governed by an *alcalde*, a sort of appointed mayor, and territorial government was hardly more complicated.

After statehood, however, a state government was created, the state was divided into counties (eventually 58) with their own governments, and within each county one or more municipalities were incorporated. Each level of government had multiple branches. In addition, the federal government and various agencies, such as the army and navy, maintained branches in the new state. Land titles were registered for the state, and comprehensive tax rolls were begun. Although the vote was generally restricted to White males, voter registration was widespread, and elections at all levels of government drew much of the voting population into the governing process. For that matter, a significant percentage of the literate White males in the state held office at some level of government. The imposition of this system brought an unprecedented degree of structure and organization to the state.

The state's non-Indian population rose from about 15,000 in 1848 to nearly 225,000 in 1852 (Lavender 1972: 165). At the same time, the state's Indian population had fallen below 100,000 and was approaching 50,000 (Cook 1978: 91-93). Thus, in 1852, although the total number of people in California was not much greater than it had been a century earlier, its organization and makeup were vastly different. The imposition of a formal, statewide government was one aspect of this organizational difference. Another was the rise of urbanism.

In Mexican colonial times, Monterey was the sole official gateway to California. All incoming ships were supposed to stop there to be inspected for tax purposes. Monterey achieved a degree of urbanism due to the presence of the colonial administration and the representatives of foreign trade interests. Fledgling ports, which would later become centers of urban development, developed at San Diego, Los Angeles, and San Francisco. The Gold Rush greatly accelerated urbanization. Urban development was stimulated also by the subsequent effects of statehood and, finally, by industrialization. These stages in the progressive development of urbanism in California are marked by physical remains that have a great deal of largely unrealized potential for archaeological research.

The first stage of urban development, centered in central and northern California, resulted from the short-lived Gold Rush and was built on the establishment of a three-level hierarchy of communities. The bottom level consisted of hundreds of small camps scattered throughout the gold-bearing ranges to serve the needs of the miners. Volcano, near Jackson, was typical; it included a few stores, a hotel, a restaurant, and 37 saloons.

These towns were served in turn by small regional cities that arose to funnel miners and supplies into the goldfields. Prior to 1849, there were no towns in interior California. Cities were quickly established along the major rivers of the Central Valley. They connected the foothill towns with the port of San Francisco, using the Sacramento and San Joaquin rivers as their highways. These regional centers were located at points near the edges of the Sierra foothills where they could conveniently supply the mining camps. At the same time, boats coming up the rivers could bring supplies and travelers in quantity from San Francisco. Sacramento, on the Sacramento River at the mouth of the American River, is a good example. In 1848 it was part of Sutter's farmlands and no town existed. By 1850 it housed 10,000 people and burgeoned with docks, warehouses, wholesalers, retailers, laundries, restaurants, hotels, newspapers, saloons, and bordellos. At the top of the hierarchy was San Francisco—the largest popula-



Fig. 85. Hydraulic water monitor. As the easily recovered placer gold was collected, miners turned to more and more intensive mining methods to recover the poorer and poorer ores. In 1849 most mining was done by individuals, but in the early 1850's mining companies were organized to use methods requiring cooperative labor, such as long sluice boxes. By the mid-1850's even more ambitious techniques were applied. When this instrument, a water monitor or cannon, was used to wash down entire hillsides, gold separated from the lighter matrix of earth and rock. Mining companies dammed downstreams higher in the hills and built water flumes to carry the stream downhill to the monitors. The tremendous pressure of the falling water, aided by the gradually constricting monitor tube, created a high-pressure water cannon that could dissolve or break up entire mountains.

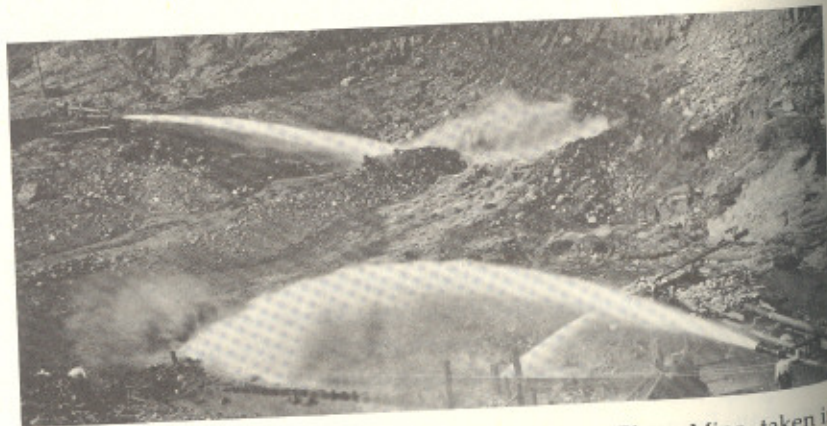


Fig. 86. This century-old photograph of the La Grange Placer Mine, taken in what is now the Shasta-Trinity National Forest, shows hydraulic monitors at work washing down a mountainside, so that the rubble can be sluiced for gold. The monitor shown in Fig. 85 is the type used here. Hydraulic mining caused vast quantities of rubble to be washed downstream, raising river levels in the valleys, drowning towns, and ruining farmlands. By the late 1850's the number of miners had decreased and the number of farmers and ranchers had risen enough that the agricultural lobby was able to overcome the mining lobby in the state legislature and force an end to hydraulic mining. Thereafter, California's gold-mining industry was limited largely to tunnels and dredging. (U.S. Forest Service Photo)

tion center, the port of entry for supplies and miners arriving in California, and the single most important contact point between California and the rest of the world. The advantages that San Francisco enjoyed as a result of its harbor and proximity to the goldfields ensured its early and continued urbanization.

During the 1850's, the search for gold became more industrialized as placer deposits were played out or consolidated into larger holdings and machinery began to replace human labor (see Figs. 85-89). As miners began to leave the goldfields in the 1850's and 1860's, many mining camps were abandoned. At the same time, and in line with the developing urbanization, the emergence of state government and the development of farming, ranching, logging, and transportation industries led to the second stage in the organization and distribution of cities and towns (see Figs. 90-96). As agriculture began to spread into the valleys and foothills of almost every part of the state, hundreds of small communities arose to serve the towns and ranches. These communities replaced mining camps at the bottom level of the urban hierarchy, serving local farmers and ranchers as the mining camps had served the miners. Some of these towns became county seats, centers of administrative and commercial services. In this respect they differed from the mining camps. They also differed in that ranch and farm life was family-oriented, in contrast to the single-male character of mining communities, so that the services provided in the farm towns differed from those of the mining camps.

Cities, such as Sacramento and Stockton, retained their function as regional centers or middle-level distribution points by shifting their emphases from supplying mining camps to providing goods and services to the new agricultural communities, and by acting as collection points for the shipment of farm and ranch products to San Francisco and eventually to the world market. As agriculture spread, similar centers emerged in other parts of the state. The rise of other industries led to the development of a greater complexity in the existing middle-level cities and to the creation of new base-level and middle-level communities in areas where none had previously existed. For example, the launching of the redwood logging industry on the northern California coast gave rise to Eureka as a mill town, port, and regional center.

Starting in the 1850's, transportation systems were developed to tie these communities together. The initial lack of overland transport in central California tied the development of middle-level cities to the coast and major river systems because water transport afforded the only means of moving large volumes of freight. Steam packet boats



Fig. 87. Ruins of the Atwell Mill, Sequoia National Park, south of Yosemite. The industrialization of gold mining led to the construction of mills to crush gold-bearing ores and extract the gold and other valuable by-products. Most of the mills were abandoned when local ores were exhausted, since the cost of dismantling and transporting them was greater than the cost of building newer, more modern facilities elsewhere. The abandoned mills thus became part of the archaeological record. Prey to fire and decay, the organic components of the mills deteriorated faster than the metal parts. Archaeologists combine their excavation skills with archival research to help reconstruct these enterprises. (U.S. Forest Service Photo)



Fig. 88. The search for gold spread over most of the state. Fair quantities of gold were found in the Klamath Mountains, and a little turned up in the Penninsular Range. This hopper served a mill in northern San Diego County. Forest fires have destroyed many of these wooden structures, but traces of them often endure in the form of earthen water channels and foundation remnants. Many of the mills were developed by small-scale entrepreneurs who kept few written records. Such enterprises often vanished as quickly as they arose, and in many cases archaeology offers the only means of studying them. Archaeologists have begun to map the occurrence of water channels and foundations to preserve evidence of their existence before the last traces vanish. (U.S. Forest Service Photo)

appeared by mid-decade to link Sacramento, Stockton, Marysville, and other river towns with San Francisco. Huge "rafts" of logs were brought down the coast to San Francisco, and coastal steamer-schooners navigated the crude harbors of middle-level port towns (Hutchinson 1969: 157-69).

The middle-level centers were tied in turn to the many communities they served by road networks, over which stagecoach and freight wagon lines operated. The state was provided with the first rapid communication connection to the eastern United States in April 1860, when the Pony Express was inaugurated, with Sacramento as its western terminus. Then, in October 1861, when the transcontinental telegraph was completed, it replaced the Pony Express, not only providing communication with the rest of the nation, but also linking communities throughout the state. A transcontinental rail connection was begun from Sacramento east across the Sierra in 1865. Completed when it joined the Union Pacific in 1869 near Promontory Point, Utah, it provided a practical, rapid, low-cost way to move people and goods from coast to coast. A statewide rail network was developed over the next 50 years to link farm and ranch communities with the national rail system and with national and foreign markets. Over time, railroads replaced most boat and wagon transportation. Railroads caused the founding of certain towns, such as Amboy, Fenner, and Goffs, which were built as water stops in the Mojave Desert between Barstow and Needles. More-specialized railroads were built into the Sierra to serve the logging industry (see Fig. 91).

San Francisco, which had developed as a major urban center because of the Gold Rush, might have been expected to decline as the gold boom waned. But the growth of the state's agricultural economy helped the city to keep its importance as the gateway for import and export transportation. Completion of the transcontinental railroad reduced the need for ship transportation to bring the state's produce to the U.S. and European markets, but the city kept its position as the nation's major Pacific port and the link between Pacific nations and the rest of the United States. This fact ensured San Francisco's place as the West Coast's population and economic center for nearly a century.

Completion of other transcontinental rail lines to southern California (the Southern Pacific and the Santa Fe railroads) led directly to the rise of cities at the ports of Los Angeles and San Diego, and fostered development of southern California's agricultural industry. San Diego, for example, had a population of only about 2,000 in 1872. Its growth and economic development became possible only after a rail connection linked it to East Coast markets. Archaeologists have be-



Fig. 89. Many miners' camps began as tent towns, but as time wore on and winter weather closed in, more-substantial buildings were built. Isolated miners built thousands of small cabins, making as much use as possible of materials at hand. In later years, whenever hard times caused urban unemployment to rise, some men would return to the mountains to pan for gold, hoping to eke out enough to pay for their supplies. Some built new cabins; others refurbished abandoned ones. This ruin, in El Dorado National Forest, shows by the milled wood framing its door that it was resurrected (or built) in the twentieth century. These solitary sites add details that are rarely found in the historical records and that differ in many ways from the remains found in mining towns. (U.S. Forest Service Photo)

come particularly interested in studying the archaeology of the state's railroads for a number of reasons: their historical importance is unquestionable, their distinctive physical structure makes them readily studied, and their effects on the state's development are easily measured.

The third major stage in urban development was the emergence of industrial cities surrounded by suburban residential communities. This development came late in California, where large-scale industrialization did not become significant until the Second World War. The state's early industrial development, including the Olema lime kilns (Treganza 1951) and the Zinn brickyards of Sacramento (Treganza 1968), reflected important changes from the Mexican era, but

the small-scale industries had developed to serve local markets. Large-scale industries serving a national and world market are a much more recent phenomenon, and as yet there has been no archaeological study of them in the state.

Apart from creating new kinds of settlements, urbanization brought other archaeologically recognizable changes. Some reflect the evolution of technology, such as the introduction of railroads, electricity, or mechanized farming. Others reflect evolving cultural values. For example, the Hispanic preference for adobe architecture was not shared by Anglo-Americans, who preferred to build with wood, which required sawmills. In the mother-lode country the Anglo-Americans made extensive use of fieldstone to construct buildings, which required the establishment of cement works for making mortar. In the lowlands, fired clay bricks were used, stimulating the establishment of brickyards as early as 1847 (Treganza 1968). These architectural preferences reflect not only differences in cultural values, but also a greater reliance on industrialization and socioeconomic complexity to achieve the same architectural ends.

In these urban centers, much of the state's ethnic diversity, discussed earlier, began to become integrated into a functioning society. This process, still far from complete, is only beginning to be studied archaeologically (see, for example, Deetz 1980).

As the predominantly Anglo-American society developed, the state's earlier inhabitants, the Mexican Californians, lost much of their position of prominence (Jordan 1973). After 1846, the Spanish and Mexican land grants gradually passed into Anglo hands through a variety of means. Much of what had been grazing land was turned into more intensively worked farms and ranches, and most of the Mexican Californiano population joined the state's growing urban population. Eventually their distinct culture became largely submerged within the much larger numbers of more recently arrived immigrants from Mexico.

One of California's largest ethnic groups, the Chinese, began to arrive during the Gold Rush (Evans 1980). Recruited by labor contractors to work in the mines, men came to California with the intention of saving their earnings and returning home to their families in China. By the early 1850's there were over 30,000 Chinese workers in California; over 20,000 landed in San Francisco in the one year 1852. Many worked for Anglo-American miners; others formed mining ventures of their own; and still others settled in cities and towns to provide service to other Chinese and to the general community as importers, merchants, and doctors, for example (Greenwood 1980). Cities such as San Francisco and Sacramento and mining camps such as



Fig. 90. Because most of the early buildings of the Anglo-American Stage were made of wood, the demand for lumber swelled with the Gold Rush. By the mid-1850's logging was established in the Sierra Nevada and on the western edges of the North Coast Ranges, where water allowed the transport of logs to mills and markets. This century-old photograph from the Hume Logging Company shows a mill crew resting from the dismemberment of a giant bole. (Courtesy of the Michigan State University Archives and Historical Collections)

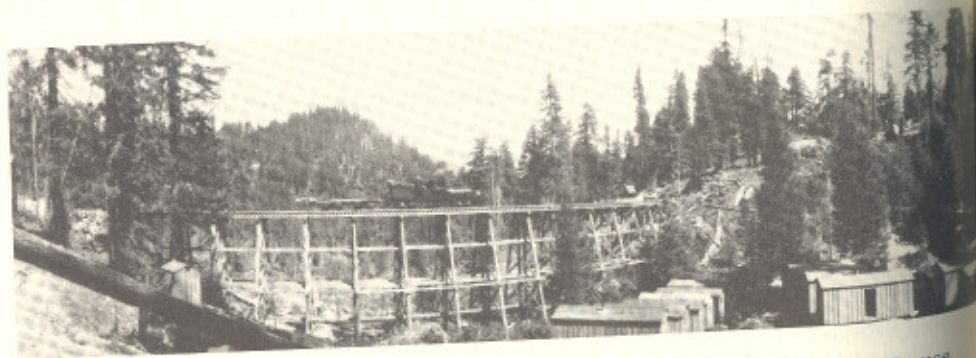


Fig. 91. Starting in the 1860's the lumber industry in California began to use narrow-gauge trains to haul logs out of the mountains to the mills. As the rail lines snaked through the forests, companies were able to expand their operations away from the rivers that first supplied their transportation. Here the Hume Company's Shay locomotive No. 1 poses on a trestle near present-day Kings Canyon National Park. In the foreground lie the portable buildings of a temporary logging camp. The ruins of these camps differ markedly from those of mining camps of the same age because the two industries used such different equipment and the workers led different ways of life. Even though the wooden structures have burned or decayed and the rails and iron machinery were salvaged for scrap, the scatters of debris and prepared roadbeds left by logging railroads and camps preserve their existence archaeologically. (Courtesy of the Michigan State University Archives and Historical Collections)

Fig. 92. An alternative to logging railroads was the water flume, a wooden trough on a trestle that tapped mountain streams and carried logs down the trough on the water to a mill at the terminus. The Sierra Nevada, with its great elevations and plentiful supplies of water and timber, made flumes technically feasible. The flumes wove around mountainsides to descend at steady gradients, often requiring spidery trestles to be built to span deep defiles. As this Hume Company trestle shows, the flumes had several problems of their own: forest fires destroyed great sections, leaving the charred remnants lining the canyons; and sometimes the planks of the flumes gave way, sending hundreds of logs cascading through the breach. Since flumes left far fewer archaeological traces than railroads, archaeologists are only beginning to study them. (Courtesy of the Michigan State University Archives and Historical Collections)

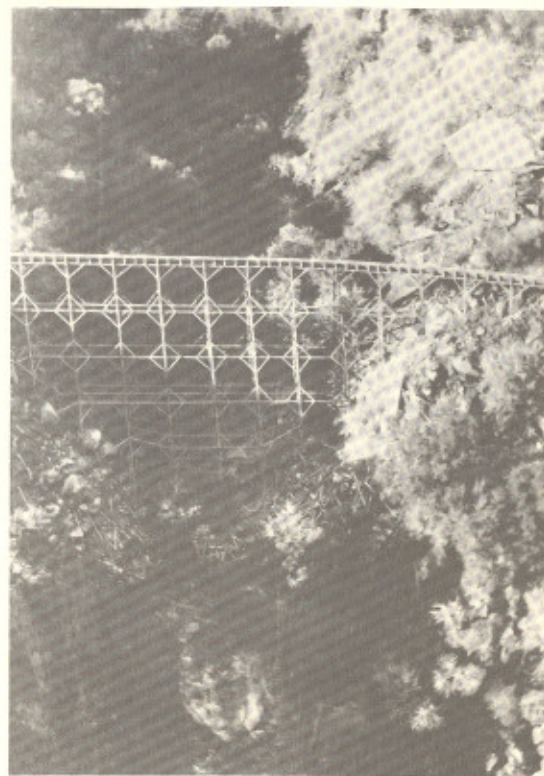


Fig. 93. The flume shown in Fig. 92 ended at Hume Lake, where the Hume-Bennett Company lumber mill was located. The flume is the curved structure in the lower left. At the mill pond, the logs were loaded onto a conveyor (trestle in upper right) to be carried to the saw in the mill building. (Courtesy of the Michigan State University Archives and Historical Collections)



Fig. 94. Hume-Bennett lumber mill. This 1911 photograph is a posed publicity shot taken by a professional photographer for the firm to use in its promotions. It shows the company's two Shay locomotives at the upper left, while the mill complex looms over a network of flumes, trestles, and conveyors. Sheds and stacks of drying lumber are at the right. Though the mill and the

Weaverville and Oroville soon featured Chinese quarters, often with distinctive architecture (Hall 1958; Hansen 1970). The Chinese are noteworthy among California's ethnic groups for having brought with them a significant portion of their culture, including architecture, religion, dress, diet, housewares, and medicine (Etter 1980). Many artifacts associated with Chinese culture have found their way into archaeological deposits, forming a distinctive component still little studied (for an exception, see Langenwaller 1980).

As the yield from the mines declined, many Chinese returned home; but others remained, working in cities or on ranches and farms. Dozens of miles of stone fences in Butte County, for example, are reputed to have been built by Chinese workers (see Figs. 97 and 98).

During the late 1860's and 1870's, the need for workers for railroad construction spurred new waves of Chinese immigration. Outbreaks of anti-Chinese violence at the time (during the Panic of 1873, for example) testify to the difficult relations between Anglo-Americans and Chinese, a situation that has improved gradually over the following century. Many families arrived to join the men already in the state. The resulting family settlement in cities and small towns created an enduring Chinese component in California society, one that has main-



wooden structures are long gone, cement foundations, roadbeds, the mill-pond dam, and other remains survive to provide archaeological evidence of the industry. The site is now protected in the Sierra National Forest. (Courtesy of Michigan State University Archives and Historical Collections)

tained its ethnic identity while becoming increasingly integrated into the economic, social, and political fabric of the society as a whole (W. Bean 1977; Chinn, Lai & Choy 1969; Ng 1972).

Other ethnic groups have been studied even less archaeologically than have the Chinese. For example, more than 2,000 Blacks came to California from the eastern United States during the first few years of the Gold Rush (Lapp 1977). Some joined the White, Chinese, and other miners; some worked in all-Black mines and lived in all-Black settlements; and still others moved into the newly developing cities. Hawaiians, or Kanaka, also came to the mines in some numbers, and there was at least one Portuguese mining camp. The town of Sonora was founded by miners from the State of Sonora in Mexico. Later waves of immigration brought the Irish in the 1870's in some numbers, as well as smaller numbers of Welsh, Scots, and Cornishmen. Japanese and Filipino immigrants began to arrive in the 1900's. Each of these groups (and many others) brought distinctive cultural backgrounds that may be reflected in the archaeological record, and excavations may reveal new facets of their histories of settlement, adaptation, and integration into California society.

Apart from the fates of immigrant groups, the destinies of Native Californians were changing at this time. When the United States took



Fig. 95. Explosion and fire at Hume-Bennett Mill. Shortly after the photograph in Fig. 94 was taken, a boiler-room explosion caused a disastrous fire at the Hume-Bennett Mill; some of the wreckage is seen here. The golden age of the California lumber industry was drawing to a close. As the virgin forests were logged over, the cost of timber recovery rose. A national environmental protection effort in the early part of the century led to the founding of the National Forest Service, among other things, which for the first time imposed restrictions on the lumber industry. Although fires had occurred earlier, once the cost of rebuilding became greater than the chance for economic return, the rebuilding of mills tapered off, and the mill ruins entered the archaeological record. (Courtesy of the Michigan State University Archives and Historical Collections)



Fig. 96. Officials of the Hume-Bennett Company walk amid the ruins of the company's mill (see Fig. 95). The vast quantity of steel from the mill was salvaged for the war effort during the First World War, but a great deal of perishable and imperishable waste was left behind to help form the site's archaeological record. Records such as these photographs are valuable aids to the archaeologist, who uses details in them to identify features in the site. At the same time, archaeological study brings to light many details about such sites that at the time were thought not worth recording, but which now help make the past more interesting and understandable. (Courtesy of the Michigan State University Archives and Historical Collections)



Fig. 97. "Chinese" wall near Chico, Butte County. The contributions of Chinese workers to the building of California's cities and railroads is as well known as their role in the Gold Rush, but they made other contributions as well. Many farms and ranches benefited from Chinese help. Miles of these stone walls, assembled in the process of clearing fields in the mid-nineteenth century, served to define boundaries and keep in livestock. Some county residents still term these structures "Chinese" walls because many were built by Chinese workers.



Fig. 98. The network of century-old stone walls that cross several California counties form a megalithic archaeological monument marking an important nineteenth-century transition: the rise of ranching in the Anglo-American Stage. These structures, some still in use, can be seen even in satellite photographs.

over California in 1846, about 150,000 Native Californians still survived (Cook 1976a: 44). The missions had been disbanded fifteen years before, and the surviving neophytes dispersed, principally into the coastal region of southern California, the South Coast Ranges, the Transverse Range, and adjacent parts of the Central Valley and the deserts. Survivors of the missions made up only a small part of this total, however, since of the 72,000 Indians who had been brought into the mission system over the previous 65 years, only 18,000 remained at the 21 missions at the time of abandonment (Cook 1978: 92). The rest of the Indian population was composed of people who lived outside the areas of heaviest European settlement. These areas were the hills and valleys of the Sierra, the southern Cascades, the Klamath Mountains, the North Coast Ranges, the northern California coast, the northeastern California basin and range country, the interior deserts and ranges, and (prior to 1840) the Central Valley.

These people were still trying to maintain a more or less traditional way of life. By 1850, however, the number of California Indians had fallen to about 100,000; by 1855, to 50,000; and by 1900, to 20,000 (Cook 1976a: 44, 70; Cook used the federal-government standard of a minimum of one-sixteenth Indian ancestry for his figures). By 1900 Indian communities living completely outside the sphere of Anglo-American society no longer existed. Many factors produced these changes, including the Gold Rush and the extensive peopling of the state by diverse immigrants; the replacement of the existing rural agrarian Mexican society by an industrial, urban society; the impact of various government laws and policies; and the relationship of Native Californian peoples and their cultures to the now-dominant Anglo-American society (for fuller treatment, see especially L. Bean 1974, 1978; Bean & Blackburn 1976; Bean & King 1974; Bean & Vane 1978; Castillo 1978a,b; Cook 1976a,b, 1978; Heizer 1974a,b; Heizer & Almquist 1971; Shipek 1978; Stewart 1978).

The decade from 1845 to 1855 was the single most disastrous period in the history of the California Indians. Their population fell by two-thirds in ten years, from 150,000 to 50,000 (Cook 1978: 93). That this decline coincides with the Gold Rush is no coincidence. Already suffering from serious population decline, disease, economic collapse, culture shock, and military conflicts with the Spaniards and Mexicans, the surviving Indian communities suffered sudden and devastating new dislocations from the Gold Rush. Miners flooded the Sierra, southern Cascades, and Klamath ranges, while farmers, ranchers, and settlers quickly spread out across the Central Valley and other valleys and foothills. Surviving Indian communities were dispossessed of most of their remaining resource bases, often through

violence. Although fighting was the direct cause of only a small proportion of the total population decline, in some cases it was responsible for most of the losses suffered by particular groups (e.g., J. Johnson 1978).

Even after the immediate impact of the Gold Rush, Indian populations continued to decline. Between 1855 and 1900, the estimated total Indian population for the whole state fell to about 20,000 people (Cook 1978: 93). This final, and almost complete, decline was caused partly by the factors just noted, but there were also other factors, and additional consequences.

Some groups suffered complete extermination. Although it was possible for a few Indian communities to survive after 1855 by retreating from the areas settled by Anglo-Americans, eventually the new settlers began to fill every part of the state. In competition for land, the Indians, with fewer resources, fewer numbers, and less-advanced technology, could not compete. Disease, starvation, and military conflict led to the extinction of the Chimariko, Halchidhoma, Wappo, Yahi, and other groups. Massacres by Anglo-Americans also played a prominent role in these extinctions. Newspapers of the period recount many incidents of random violence against Indians: of casual murder and of massive reprisals for petty offenses (see, for example, Heizer 1974a,b; Heizer & Almquist 1971). These atrocities were not limited to these four groups by any means, but other, usually larger, groups had at least a few survivors. In some Indian communities, virtually every child in the settlement was kidnapped and sold into slavery in another part of the state (Cook 1976b), depriving that community of its next generation and further accelerating the population decline. The story of Ishi (T. Kroeber 1959), a Yahi found starving and alone in the foothills near Oroville in 1911, relates the story of the last American Indian to have lived almost completely outside the sphere of Anglo-American society. But this portrait is also symbolically important because the fate of Ishi, the last living member of the Yahi, mirrors the fate of traditional Native American culture in California.

Many of those who survived actual extinction were confined to reservations. The U.S. government had developed a reservation policy to deal with Native Americans elsewhere, so it was not surprising that this policy was extended to California when it became a state. Although often justified in humanitarian terms, the actual function of the reservation system was to eliminate competition between Whites and Indians for land by confining the Indians to isolated, remote tracts of land that Whites did not want. In principle the land was held by the government in trust for the Indians. The government promised to provide support and services to the Indians who agreed to

cede their rights to their traditional homes and accept reservation confinement. Shortly after California's statehood, U.S. commissioners secured marks from Indians on eighteen treaties, never ratified by the Senate, that yielded most of the state to the U.S. government. Some evidence indicates that the treaties did not represent informed or authorized decisions on the part of the Indian signers (see, for instance, Heizer 1978e).

Eventually the federal government established a reservation system in California, under the administration of the Bureau of Indian Affairs. As in the rest of the United States, the reality of the reservation experience fell far short of the ideal. Promises of food, supplies, housing, health care and education frequently were not kept. The effects of dislocation and culture shock on the Indians were pervasive. The reservations were usually in remote areas and lacked resources that would have allowed Indians to make some sort of living. Different, incompatible groups were often placed on the same reservation. The resulting privation was located far enough from public view to allow it to be largely ignored.

Other surviving Indians lived on rancherias, which differed from reservations (Castillo 1978a; Hill 1978). These small, peripheral, remnant Indian communities had managed to survive long enough to be granted legal recognition. The federal government assumed trust status for rancherias as well, and problems similar to those of the reservations were common. By 1900, however, a significant portion of the state's surviving Indians lived on either reservations or rancherias.

Indians living under these conditions suffered not only population decline, but considerable loss to their remaining cultures as well. Only in some very remote corners of the state, where interaction with Anglo-American society was still moderate, did traditional culture survive to any greater degree. The Klamath River, the Pit River, and northern parts of the North Coast Ranges (see Figs. 99-102) offered some of these refuges.

At the same time programs were being established to acculturate some Indians. It was assumed that, since Indian culture could not survive, the best salve was to prepare Indians for assimilation into modern society. The Sherman School in Los Angeles typified such an effort. Children from many different Indian communities were sent by government mandate to be educated at this boarding school, far from any contact with their families, communities, or cultures. English was the only language of instruction, and the only cultural values and information taught were Anglo-American. Although such programs succeeded in breaking down the cultural identities and family ties of many children, causing severe psychological and social

problems, they were unsuccessful in preparing the Indians to enter the mainstream of society.

As the century wore on, however, a growing percentage of Indians did become involved with the now-dominant Anglo-American society to one degree or another. In the nineteenth century there was not yet a significant urban Indian population. Indians were denied many rights of citizenship, including the right to vote, to serve on juries, to testify at trials, to own property in the same way as Whites, and to purchase alcoholic beverages. The legal status of Indians under U.S. law bore many resemblances to that of children, criminals, and the mentally incompetent. They were denied equal access to employment, financial institutions, and education. It is not surprising that there were few Indians successfully involved in urban, industrial society at this time. Most Indians approached Anglo-American society by living in rural areas or on the edges of towns. They lived in poverty, on lands that Whites did not want, exchanging labor for cash, and supplementing their wages with varying amounts of traditional hunting, fishing, and plant collecting. This was the condition of most of the 20,000 remaining Indians in California in 1900.

The state's Indian population stopped declining around 1900 and by 1910 had begun to rise (Cook 1976a: 70). This was not due to any significant changes in the Anglo-American treatment of Indians. Instead, it meant that Indian numbers had been so reduced that Whites no longer viewed Indians as direct competition for land and resources. Military hostilities against Indians had declined a generation earlier, and the practice of kidnapping had been virtually eliminated. With the relaxation of these pressures, it was possible for small numbers of Indians to survive, albeit at a poverty level.

Today Indians in California number about 200,000 (1980 census). The figure probably includes 15 percent or more Indians who have migrated from other states, as part of the general migration that has been the main source of urban growth in California for the last 40 years. The 1960 census showed only about 40,000 Indians living in the state (Cook 1976a: 74-77), so most of the growth has occurred in the last 20 years. Employment, education, and social and health services for Indians have improved somewhat each decade, although Native Californians still remain the poorest segment of contemporary California society.

The survival and management of reservations and rancherias in the state has been promoted by government programs and periodic reform movements, but other, more numerous programs and laws have served to withdraw support and services from the reservations and rancherias and to close them down. These contrary directions in fed-



Fig. 99. After the Gold Rush, surviving Indians were able to follow traditional subsistence activities only where permanent Anglo-American settlement did not preempt the land. In this nineteenth-century photograph, taken in the high Sierra, a Miwok conical burden basket containing some basketry winnowing trays leans against a temporary shelter. The iron bar (lower left) was used to weigh down the base of the shelter. (U.S. Forest Service Photo)



Fig. 100. A Diegueño temporary shelter near Palomar Mountain in northern San Diego County. As the Forest Service uniform indicates, the photograph was taken a half century ago, but the shelter was old even then. A temporary campsite made by a single family to exploit oak and chaparral resources in Cleveland National Forest atop the Penninsular Range, it reflects the return to a small-scale, more diffuse, Archaic-like existence by the survivors of the fall of the missions. (U.S. Forest Service Photo)



Fig. 101. This photograph, probably taken about 1920, shows four Miwok women in the Sierra National Forest. The bark-slab house behind them, more substantial than the temporary shelters shown in Figs. 99 and 100, was built over a pole frame and has a roofed doorway passage (right rear). A cooking basket in the foreground is flanked by two pots—notable introductions. A traditional burden basket is in the foreground on the left, and two traditional winnowing trays rest on a shelf on the side of the house. The camp was located in an area that had been logged over; thus, growth was not as mature as today. In some cases the reduction of mature habitats favored plant gathering, since many seed-bearing plants flourish in disturbed habitats. Many prehistoric peoples capitalized on this pattern by periodically burning off mature forest and chaparral habitats. One consequence of Anglo-American land management was the reduced ability of the Indians to stimulate the production of wild-food resources in this way. (U.S. Forest Service Photo)



Fig. 102. This 1929 photograph, probably taken near Owens Valley, shows a Shoshonean brush shelter at a pine-nut gathering station. Two conical burden baskets lean against it. The prepared-earth base of the house suggests more substance than a temporary shelter would require, indicating that the camp is more comparable to a seasonal occupation site. The camp is another instance of the resumption of Archaic-like seasonal gathering in areas where Anglo-American settlement did not preempt the land and its resources. (U.S. Forest Service Photo)

eral policy have made it impossible for Indians to adapt to any consistent program. One net result of these programs is that most of the lands Native Californians owned or controlled in 1900 have now been taken from them (Castillo 1978a,b; Shipek 1978; Stewart 1978). This process has forced much of the state's Indian population to migrate into cities and towns, where they generally live outside the framework of traditional community, kin, and family relationships.

In spite of these difficulties, California Indians have managed to survive as a distinct biological group, and aspects of the traditional cultures of many Native Californian societies have endured. This can be seen in two different respects. On the one hand, Native Californians have adapted and adjusted themselves and their ways of life to existence in Anglo-American-dominated society, modifying their traditional cultures to make them more appropriate to contemporary life



Fig. 103. Stoney Creek Rancheria was established in the nineteenth century in the foothills of western Glenn County as a remnant settlement of the Nomlaki people, the central division of the Wintun language group. The semi-subterranean dance house is similar in design to a pit house but much larger. Dance houses appeared in the second half of the nineteenth century as part of a religious movement that began in response to the collapse of the traditional way of life under the impact of Anglo-American settlement. A number of Native American communities in northern California still maintain dance houses for religious observances. (U.S. Forest Service Photo)



Fig. 104. Guard-tower ruin. This collapsed structure, high in the Klamath Mountains, reflects an age not yet studied archaeologically: the Second World War. The cabin was built to shelter an observer watching for enemy aircraft, and is one of a number of such outposts established in wilderness areas along the coast. In northwestern California some of these stations were occupied by Native Americans, and some by Anglo-Americans. The cultural differences between the two groups may be reflected in the archaeological remains at the cabin sites. These sites as a group should be distinct from miners' cabins, Forest Service guard stations, and other twentieth-century occupation sites in these mountains.

and incorporating features of the dominant culture into their own. The result is a distinctive ethnic tradition, which by 1900 differed from what it had been in 1850, and differs today from what it was in 1900.

On the other hand, some aspects of traditional culture have survived, with little significant change since the Gold Rush, within the body of contemporary Indian culture (see Fig. 103). It should be pointed out that there has been almost no archaeological research at reservations, rancherias, or other settings that might shed some light on the nature and processes of this rather remarkable survival, so our knowledge of it derives primarily from ethnographic studies (for a study combining ethnographic and archaeological data of this period, see Theodoratus, Chartkoff & Chartkoff 1979). In general, basketry and certain other crafts, the construction of sweathouses and dance houses, and the making of ritual costumes have survived to varying

degrees, along with the knowledge of traditional subsistence techniques like acorn leaching and salmon fishing. In addition, traditional religious activities have endured to varying degrees in many parts of the state (usually remote areas), as have such social features as patterns of social relationship, travel to visit kin, and burial rites.

Many Native Californian communities foster the teaching of their traditional language and culture to their children. The political and legal sophistication of many Indians today allows them to deal with some success with the growing, changing maze of agencies that confront them and impinge on their cultural continuity. Thus, although wholly traditional life has ended for California's Indians, they may be able to preserve distinct ethnic identities, so that their cultures, descended from thousands of years of development and adapted to more than two centuries of enforced contact with other cultures, will endure (see Fig. 104).

ARCHAEOLOGY OF THE HISTORICAL PERIOD

Until environmental impact studies made them more common, archaeological studies of historical sites were fairly infrequent. The influence of A. L. Kroeber (see Appendix A), the relatively recent nature of California's historical remains, and the anthropological—rather than historical—orientation of most California archaeologists caused most archaeological research in the state to be devoted to prehistoric cultures. Some archaeologists have been interested in excavating historical sites for a long time, however, and historical archaeology has become an important field within archaeology (Deetz 1977; South 1977). In order to indicate the variety of archaeological remains dating to the Historical Period in California, and the kinds of things archaeologists can say about them, we will describe seven of the most important projects that have been undertaken in the state (see Map 48; space precludes discussing a number of other important

Map 48 (facing page). Excavated sites of the Historical Period. Relatively few non-Indian sites were excavated by California archaeologists until the last few years. This map indicates the locations of non-Indian sites for which excavation reports have been published. The number of such sites should be considerably greater in another decade. These sites, which by definition fall within the historical period, have been grouped by ethnic group. Many of them also have evidence of California Indian presence. In addition, it should be mentioned that many Final Pacific Period Indian sites also were occupied into the historical era and reveal information about the impact of contact with foreigners on indigenous culture.

1. Fort Humboldt
2. William B. Ide Adobe
3. Fort Ross
4. Drake's Bay
5. Petaluma Adobe
6. Old Sacramento
7. Sutter's Fort
8. Somersville
9. Mission San Juan Bautista
10. White Ranch
11. Mission Nuestra Señora de la Soledad
12. Mission San Antonio de Padua
13. Mission San Luis Obispo de Tolosa
14. Mission La Purísima Concepción
15. Royal Presidio of Santa Barbara
16. Mission San Buenaventura
17. Hugo Reid Adobe
18. Los Cerritos Adobe
19. Sepulveda Rancho
20. Mission San Luís Rey de Francia
21. Mission San Diego de Alcalá
22. Royal Presidio of San Diego

Spanish sites (1769–1822)

- Mission San Juan Bautista (9)
- Mission Nuestra Señora de la Soledad (11)
- Mission San Antonio de Padua (12)
- Mission San Luis Obispo de Tolosa (13)
- Mission La Purísima Concepción (14)
- Royal Presidio of Santa Barbara (15)
- Mission San Buenaventura (16)
- Mission San Luís Rey de Francia (20)
- Mission San Diego de Alcalá (21)
- Royal Presidio of San Diego (22)

Mexican sites (1822–1846)

- Petaluma Adobe (5)
- Hugo Reid Adobe (17)
- Los Cerritos Adobe (18)
- Sepulveda Adobe (19)

Anglo-American sites (1846–1929)

- Fort Humboldt (1)
- William B. Ide Adobe (2)
- Old Sacramento (6)
- Somersville (8)
- White Ranch (10)

Others

- Fort Ross (Russian) (3)
- Drake's Bay (Spanish or possibly British) (4)
- Sutter's Fort (Swiss) (7)

